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**ENERGY
MANAGEMENT**

**Controls Over the
Livermore Laboratory's
Indirect Costs Are
Inadequate**





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**Resources, Community, and
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The Honorable John D. Dingell
Chairman, Subcommittee on Oversight
and Investigations
Committee on Energy and Commerce
House of Representatives

The Honorable Jimmy Hayes
Chairman, Subcommittee on
Investigations and Oversight
Committee on Science, Space,
and Technology
House of Representatives

This report to you provides information on the management and oversight of indirect costs at the Department of Energy's Lawrence Livermore National Laboratory. Our report contains recommendations designed to ensure that direct costs included in the Livermore Laboratory's overhead pool are removed and that adequate internal controls ensuring the reliability of the laboratory's financial information are developed and implemented.

As arranged with your office, unless you publicly announce its contents earlier, we will make no further distribution of this report until 30 days after the date of this letter. At that time, we will send copies to the Secretary of Energy; the Inspector General, Department of Energy; the Director, Office of Management and Budget; and other interested parties. We will make copies available to others on request.

This work was performed under the direction of Victor S. Rezendes, Director, Energy and Science Issues, who can be reached on (202) 512-3841 if you or your staff have any questions. Major contributors to this report are listed in appendix I.

J. Dexter Peach
Assistant Comptroller General

Executive Summary

Purpose

In fiscal year 1991, the Lawrence Livermore National Laboratory, a Department of Energy (DOE) research and development facility with annual expenditures in excess of \$1 billion, incurred about \$436 million in indirect costs. Indirect costs are those that are not specifically identifiable with a particular program, such as costs for facility maintenance or accounting services. Concerned that indirect costs are not being adequately managed and controlled, the Chairman, Subcommittee on Oversight and Investigations, House Committee on Energy and Commerce, and the former Chairman, Subcommittee on Investigations and Oversight, House Committee on Science, Space, and Technology, asked GAO to examine the adequacy of (1) financial management controls over indirect costs at the Livermore Laboratory and (2) DOE's oversight of the laboratory's indirect costs.

Background

DOE's contract requires the Livermore Laboratory to comply with the accounting policies, principles, and standards for direct and indirect costs that DOE establishes. The contract also requires that the laboratory comply with the Cost Accounting Standards of the Federal Acquisition Regulation. To prevent one program from subsidizing another, the Cost Accounting Standards require that indirect cost pools, such as the laboratory's overhead pool, be distributed to programs that benefit from the expenditures or that cause the costs to be incurred. The Cost Accounting Standards also require that costs specifically identifiable with a particular program be charged directly to that program.

DOE's San Francisco Operations Office is responsible for overseeing the Livermore Laboratory, including the management and control of indirect costs. The Chief Financial Officer at DOE headquarters is responsible for developing the agency's financial management policies and procedures.

Results in Brief

The financial management controls over indirect costs at the Livermore Laboratory have not ensured that costs are assigned to the programs that either benefit from the expenditures or cause the costs to be incurred as required by the Cost Accounting Standards. At least \$10 million of defense program costs¹ were improperly charged to the overhead cost pool in fiscal year 1991, supplementing the total funding available to defense programs and reducing the funding available to nondefense programs. Similar costs for these activities were also included in the overhead pools

¹In this report, defense program costs refer to a number of individual DOE programs directed by DOE's Assistant Secretary for Defense Programs.

for fiscal years 1992 and 1993. The laboratory's lack of compliance with the Cost Accounting Standards is attributable, in part, to the fact that the laboratory had not established a written policy for classifying costs as either direct or indirect until September 1993.

In addition, the internal controls needed to ensure reliable accounting information are not in place. For example, the laboratory uses a decentralized management structure that does not include a fully documented financial system or sufficient separation of duties. We found a number of cases in which either the costs of specific activities were not readily identifiable or were represented incorrectly in the accounting system. As a result, the accounting information is of limited use to management for planning or control purposes or for independent oversight.

Since 1991, in response to a number of factors, such as criticism by DOE's Inspector General, DOE has taken steps to provide oversight of contractors' indirect costs. However, reviews conducted in 1992 by nine DOE offices did not identify the direct program costs included in overhead pools that reviews by GAO, the DOE Inspector General, and a certified public accounting firm determined did not comply with the Cost Accounting Standards. Currently, DOE's operations offices are implementing indirect cost oversight requirements that were established in January 1993 to ensure, among other things, the reasonableness of contractors' indirect costs. These oversight tasks include conducting a number of detailed reviews of contractors' indirect costs at the Livermore Laboratory and other DOE sites. At this time, it is too early in the oversight program for GAO to determine if the reviews will be adequate to meet DOE's oversight objectives. For example, a recent DOE headquarters review of DOE's San Francisco office that included an examination of the office's indirect cost oversight activities did not examine the indirect cost reviews that were conducted according to the January 1993 guidance because the reviews had not yet been completed.

Principal Findings

Financial Management Controls Are Inadequate

Direct program costs have been improperly included in the overhead cost pool. GAO's review of about 200 of the laboratory's approximately 2,700 overhead accounts identified \$10 million in direct program costs that were

wholly or primarily caused by, or incurred for, the benefit of defense programs but that were included in the overhead pool in fiscal year 1991. These program costs should have been charged directly to defense programs in their entirety. However, they were inappropriately allocated to all programs via the overhead pool. For example, in fiscal year 1991, the overhead pool included at least \$5.5 million in costs that resulted from the operation and maintenance of Site 300, a remote facility that supports the high-explosive test needs of defense programs.

In addition, the laboratory cannot ensure that costs charged to indirect cost accounts are related to the accounts' stated purposes. GAO found a number of cases in which either the costs of specific activities were not readily identifiable or were represented incorrectly. For example, weapons parts and ammunition costs were charged to an account titled "Emergency Meal Chits," and charges for five laboratory staff assigned to DOE's Office of Military Applications were in an account titled "Lab Business Center."

These problems occurred because the laboratory's decentralized management structure does not include a fully documented financial system or adequate separation of duties—key controls needed to ensure reliable information. For example, accounting functions, such as assigning and maintaining account titles, determining the costs that will be charged to specific accounts, and validating charges to the accounts, have been delegated to over 100 resource managers within both overhead and direct program areas, without adequate independent oversight.

In addition, the laboratory does not maintain account documentation that identifies the specific purposes of the individual accounts—that is, documentation that defines the costs that are proper for each account. Furthermore, the many resource managers who assign the account titles are not required to document the purposes of their individual accounts beyond assigning account titles. Numerous accounts have nondescriptive account titles such as "Project A," which do not provide information on the nature of the costs in the account. As such, employees are authorized to use accounts with no documented purpose.

Because employees are authorized in some cases to use accounts with no documented purpose and because the laboratory cannot confirm that charges are made to the proper accounts, expenditures can be easily obscured in the accounting system. This increases the potential for the waste and abuse of millions of taxpayers' dollars.

Implementation of Recent Indirect Cost Oversight Initiatives Is Underway

On December 31, 1991, DOE's management approved two action plans proposed by the Chief Financial Officer to (1) ensure that the Cost Accounting Standards are complied with and (2) determine if contractor overhead costs were reasonable. However, the reviews conducted by nine DOE offices in 1992, under the first action plan to determine contractor compliance with the Cost Accounting Standards, did not identify the direct program costs included in overhead pools that reviews by GAO, the Inspector General, and a certified public accounting firm determined did not comply with the Cost Accounting Standards. For example, the report on the Livermore Laboratory by DOE's San Francisco office stated that the laboratory was complying with the Cost Accounting Standards, but the scope and methodology of the review were not adequate to assess compliance.

Implementation requirements for the Chief Financial Officer's second action plan, which focused on the reasonableness of contractors' indirect costs, were established in 1992 and 1993. The actions taken by DOE's San Francisco office to implement the second action plan have not progressed enough for GAO to assess whether they will resolve the concerns that the plan was designed to address, such as whether contractors' indirect costs are reasonable. Current plans call for Livermore's indirect costs to be examined in 15 reviews of specific indirect cost categories, such as maintenance, over the 4-year period of fiscal years 1993 through 1996. As of September 1993, the reports from the initial reviews conducted by DOE's San Francisco office had not yet been completed, and one of the fiscal year 1993 reviews had been deferred.

Recommendations

GAO recommends that the Secretary of Energy (1) direct the Chief Financial Officer to ensure that direct costs included in the laboratory's overhead pool are removed and (2) direct the Livermore Laboratory to develop the internal controls required to ensure that the laboratory's financial information is reliable, such as fully documenting its account structure to identify the authorized purpose of each account.

Agency Comments

We discussed the facts in this report with DOE officials at headquarters and the San Francisco Operations Office, including the DOE Deputy Controller and the San Francisco Chief Financial Officer, and with contractor officials from the Livermore Laboratory. DOE officials generally agreed with the facts presented. The laboratory officials agreed that GAO found deficiencies, but they did not agree that the deficiencies were systemic.

However, GAO believes the problems are systemic. In addition to finding inaccurate financial data, GAO found that the specific controls needed to provide reliable financial information are not in place. As requested, we did not obtain written agency comments on a draft of this report.

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Abbreviations

DOE	Department of Energy
GAO	General Accounting Office
M&O	Management and operating

Introduction

The Lawrence Livermore National Laboratory is a Department of Energy (DOE) research and development facility that is operated by the University of California under a management and operating (M&O) contract. Through its program offices, DOE provides funding for the costs directly associated with each of the laboratory's research and development programs as well as for the indirect costs that support multiple programs, such as accounting services and facility maintenance. In fiscal year 1991, the laboratory incurred about \$436 million in indirect costs from total expenditures of \$1.1 billion.

The laboratory's contract with DOE requires that the laboratory comply with DOE's orders that establish accounting policies, principles, and standards for direct and indirect costs. In addition to complying with DOE's orders, the laboratory is required by contract to comply with the Cost Accounting Standards of the Federal Acquisition Regulation, which include additional accounting guidance regarding indirect costs. DOE's San Francisco Operations Office exercises general control over the work at the laboratory, providing oversight and ensuring that the contractor complies with the requirements of its contract with DOE.

Background

The Lawrence Livermore National Laboratory was established in 1952 as a nuclear weapons research and development facility. Since its establishment, the laboratory has been operated by the University of California under M&O contracts that are renegotiated every 5 years. The laboratory's overall mission is to serve as a scientific, technical, and engineering resource for the federal government. The Weapons Research, Development, and Testing program, guided by DOE's Assistant Secretary for Defense Programs, represents the largest program at the laboratory in terms of total expenditures. In this report, all programs under the Assistant Secretary for Defense Programs are referred to collectively as "defense programs." Other DOE programs at the laboratory, which we refer to collectively as "nondefense programs," include (1) uranium enrichment activities, guided by the Assistant Secretary for Nuclear Energy; (2) magnetic fusion, basic energy, and biological/environmental research, guided by the Office of Energy Research; and (3) site clean-up activities, guided by the Office of Environmental Restoration and Waste Management. Congress provides funding for DOE's defense and nondefense programs in a number of separate appropriation accounts, such as Atomic Energy Defense Activities-Weapons Activities, Uranium Supply and Enrichment Activities, and Energy Conservation.

DOE pays the direct and indirect costs of the laboratory's research and development programs. Direct costs, or those that can be specifically identified with a particular program, include scientists' salaries and project-specific equipment and materials. Conversely, indirect costs are not specifically identified with a particular program. For example, the laboratory has identified the costs of security, facility maintenance, utilities, and business administrative services, such as accounting and procurement, as indirect costs.

Methods of Indirect Cost Distribution

Because indirect costs are not identified with any specific research program, they should not be charged directly to program accounts. Instead, the indirect costs should be accumulated, or "pooled," in specific accounts and then distributed to programs in a manner that reasonably reflects the benefit each program receives from the indirect costs. The laboratory accumulates indirect costs in either overhead pools, which distribute costs to all programs, or distributed support pools, which distribute costs only to the users of certain support services as described further below.

The overhead pool is the laboratory's largest component of indirect cost. Overhead costs in fiscal year 1991 were \$262 million, 60 percent of the laboratory's total indirect costs of \$436 million. These costs were distributed to all laboratory programs according to a fixed rate established by the laboratory Controller's organization. The rate distributes overhead costs on the basis of the labor expenses of laboratory programs. In fiscal year 1991, the general overhead rate was 72 percent, meaning that for every dollar of wage expense charged to a program account, the program was charged an additional 72 cents to cover overhead costs.¹

The second-largest component of the laboratory's total indirect costs are service center charges from organizations referred to as "recharge centers" at Livermore. Service center costs in fiscal year 1991, excluding the amounts that were distributed to overhead organizations and that consequently were included in overhead totals, were at least \$122 million.² These centers provide support in the form of goods or services to other laboratory organizations. The costs of these service centers, such as the computer center, are pooled and charged to the organizations that use the

¹In fiscal year 1993, Livermore separated its overhead pool into two pools: one for overhead costs and one for "general and administrative" costs.

²Total service center costs reflect only official recharges that are identified separately in the accounting system and do not include those service center costs that are not tracked.

services in proportion to the amount of services provided. Each center establishes a rate, such as a per-minute charge for computer usage, and the center's costs of operation are distributed according to this rate.

The balance of indirect costs is referred to as "support burden" that represents the charges necessary to cover the costs of certain scientific and technical support organizations charged to users of these services. Support burden charges were \$51 million in fiscal year 1991 after the exclusion of the \$6 million that was distributed to overhead organizations and thus was included in the overhead pool.

Financial Management Structure at the Laboratory

Financial management at the laboratory, including budgeting and accounting, is the responsibility of the Controller's organization. The Controller, who reports to the laboratory Director, is the chief authority for the laboratory for all financial policies and procedures. The Budget Office and the Finance Department are responsible to the Controller for implementing financial policies and procedures. The Budget Office is responsible for interpreting DOE's and the laboratory's budgeting policies and procedures. The office analyzes the status and trends of the budget and provides budget-related information, analysis, and support to laboratory management. The Finance Department administers the accounting functions that support laboratory operations, such as payroll, accounts receivable, and general accounting. It is also responsible for collecting and reporting financial information to laboratory management and DOE as directed by the Controller.

Outside of the Controller's organization, approximately 100 individuals, referred to as "resource managers," have budgeting and accounting responsibilities within the laboratory's research programs and support organizations. Although resource managers must adhere to financial policies and procedures established by the Controller's organization, they report to the Associate Directors—such as the Associate Director for Engineering—who are the senior managers for laboratory organizations. The budgeting responsibilities of resource managers include the development, execution, and administration of budget plans and the monitoring of expenditures to assure that organizational budget plans are met. Accounting responsibilities of resource managers include opening and closing accounts, organizing accounts into a structure that captures all organizational costs, establishing what specific costs can be charged to each account, and validating charges to accounts. Resource managers are

also responsible for reporting expenditures versus budgets to management.

Financial Management Principles and Requirements

DOE's financial management principles are contained in DOE's orders. These include DOE Order 2200.4, Accounting Overview, which establishes DOE's general accounting policies, principles, and standards; and DOE Order 2200.6A, Financial Accounting, which establishes, among other things, DOE's policy and procedures regarding the proper use of funds. For example, DOE Order 2200.4 states that the overall goal of DOE's accounting and financial reporting is to provide information that is useful in managing the agency's resources and keeping them accountable. The order also states that, to be useful, information must be, among other things, reliable. Reliability is defined in the order as the quality of information that ensures that it is reasonably free from error and bias and that it faithfully represents what it purports to represent.

The financial management requirements that DOE's M&O contractors such as the Livermore Laboratory must meet are contained in DOE's contracts with the individual contractors. These contracts are typically renewed every 5 years. Livermore's current contract, last renewed in November 1992, requires Livermore to comply with DOE's financial management orders. While the prior contract, in effect from 1987 to 1992, did not specifically require compliance with most DOE orders, the laboratory accepted many of them, including those related to financial management. Livermore's current contract, like the laboratory's prior contracts, requires compliance with the Cost Accounting Standards of the Federal Acquisition Regulation, which, among other things, establishes specific requirements for the management of indirect costs. The Cost Accounting Standards provide guidance to ensure a consistent determination of direct and indirect costs and the proper accumulation and distribution of indirect costs.

DOE's Financial Management Oversight Requirements

DOE's policy and general procedures governing the oversight of the financial management activities of contractors such as Livermore was established in September 1991 in DOE Order 2200.13.³ DOE oversight, as outlined in the order, should ensure that (1) contractor cost distribution systems distribute overhead costs to appropriate accounts; (2) overhead cost pools are properly accumulated, controlled, and distributed; and (3) similar overhead costs are treated consistently throughout the

³Prior to DOE Order 2200.13, there was no such guidance.

organization. DOE's reviews of contractor financial systems are also to ensure that contractors provide reliable financial information for developing and implementing budgets and for measuring performance. In addition, DOE is to ensure that revenues, expenditures, and costs are recorded properly so that reliable financial reports can be prepared and accountability for assets can be maintained.

Under the order, responsibility for overseeing contractors' financial systems is shared between DOE headquarters and its regional offices, which are referred to as operations offices. DOE's Chief Financial Officer is responsible for, among other things, developing and maintaining departmental policy pertaining to the oversight of contractors' financial management and for directing and conducting special purpose reviews. The Chief Financial Officer is also responsible for assessing if DOE operations offices comply with their oversight responsibilities, and for assuring that sufficient resources are available to accomplish this oversight function.

Operations office chief financial officers, in turn, are responsible for accomplishing effective financial management oversight of contractors. They are to serve as the focal point for identifying, addressing, and resolving local contractor financial management issues. They are also required to set priorities, establish review plans, perform reviews, provide written approval of corrective action plans, and follow up on corrective actions as appropriate.

Objectives, Scope, and Methodology

The Chairman, Subcommittee on Oversight and Investigations, House Committee on Energy and Commerce, and the former Chairman, Subcommittee on Investigations and Oversight, House Committee on Science, Space, and Technology, asked us to examine the adequacy of (1) financial management controls at the Livermore Laboratory over indirect costs and (2) DOE's oversight of the laboratory's indirect costs.

We conducted our review at DOE headquarters; at DOE's San Francisco Operations Office in Oakland, California; and at the Lawrence Livermore National Laboratory in Livermore, California, from December 1991 to November 1992 with updates through September 1993. We focused our review on the laboratory's accounting and budgeting processes for fiscal years 1991 and 1992, but we also monitored subsequent changes that occurred in those processes. Our work was done in accordance with generally accepted government auditing standards.

This report focuses on the overhead component of indirect costs. We initially limited the scope of our work to overhead and service center charges, excluding support burdens, which comprise a much less significant portion of the laboratory's indirect costs. During our review, the laboratory developed new policies and procedures for managing service center charges that, if effectively implemented, should address the majority of the problems we identified with this component of indirect costs. For these reasons, service centers are not included in this report.

To evaluate the laboratory's financial management controls over indirect costs, we met with representatives from the Controller's organization to obtain an understanding of their accounting and budgeting policies and procedures for the management of indirect costs. Using applicable criteria, including Cost Accounting Standards, we evaluated nearly 200 of the laboratory's 2,700 overhead accounts to determine whether such costs were appropriate to the laboratory's overhead pool. The 200 accounts, which constitute \$21 million of the \$262 million total in fiscal year 1991 overhead costs at the laboratory, were judgmentally selected on the basis of account titles that (1) indicated the costs were potentially inappropriate to the overhead pool or (2) were nondescriptive, such as "Project A." Because of the large number of accounts, we did not, however, examine all of the accounts with such titles.

We also reviewed and evaluated the financial management roles and responsibilities of resource managers for organizations that allocated costs via overhead. In addition, we reviewed recent laboratory internal reports regarding indirect costs and financial management systems, as well as related University of California internal audit reports. During our review, DOE started requiring that contractors report monthly to DOE on actual indirect cost expenditures compared with budgeted amounts. In addition, the laboratory established a new budget formulation process for fiscal year 1994 that required a systematic internal review of indirect cost activities. Because these changes, if effectively implemented, would largely address the budgeting problems we identified, the laboratory's budgeting controls are not discussed in this report.

To evaluate the adequacy of DOE's oversight over indirect costs at Livermore, we met with officials from DOE's headquarters and San Francisco Operations Office to determine how they fulfill their contractor financial management oversight responsibilities related to indirect costs. We also reviewed all supporting documentation for the operations office's 1992 review of Livermore's indirect cost system to evaluate the support for

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the conclusions reached and to determine the extent to which DOE's San Francisco office examined the laboratory's indirect costs. We also reviewed relevant reports from the DOE Inspector General and from DOE's recent Federal Managers' Financial Integrity Act reviews.

Financial Management Controls Over Indirect Costs at the Livermore Laboratory Are Inadequate

Financial management controls at the Livermore Laboratory have not ensured that indirect costs are assigned to the programs that either benefit from the expenditures or cause the costs to be incurred. At least \$10 million of defense program costs were improperly charged to overhead at the Livermore Laboratory in fiscal year 1991, and similar costs for these activities were also included in the overhead pools for fiscal years 1992 and 1993. As a result, the total funding available to defense programs was supplemented and the funding available to nondefense programs was reduced. In another case, Livermore improperly charged a construction project to overhead instead of using the funds that Congress specifically appropriates for construction activities.

In addition, the internal controls needed to ensure reliable accounting information are not in place. For example, the laboratory uses a decentralized management structure that does not include fully documented financial systems nor sufficient separation of duties—key controls needed to ensure reliable information. We found a number of cases in which either the costs of specific activities were not readily identifiable or were represented incorrectly in the accounting system. As a result, the accounting information is of limited use to management for planning or control purposes or for independent oversight. Moreover, because employees are authorized in some cases to use accounts with no documented purpose and because the laboratory cannot confirm that charges are being made to the proper accounts, the potential for the waste and abuse of millions of taxpayers' dollars exists.

Indirect Costs Have Been Improperly Classified

The Livermore Laboratory has not properly classified indirect costs. Federal Cost Accounting Standards require that indirect cost pools be assigned to the "final cost objectives," e.g., programs that benefit from the expenditures or that caused the costs to be incurred. That is—in large part to prevent one program from subsidizing another—there should be a beneficial or causal relationship between the pooled costs and the programs that bear the costs. Indirect costs are to be accumulated in cost pools that are homogeneous, meaning that each activity cost included therein should provide the same or a similar benefit to each of the programs that share the costs of the pool. Furthermore, costs that are specifically identifiable with a particular cost objective or program are to be charged directly to that program. However, direct program costs at the Livermore Laboratory have been improperly included in overhead. Noncompliance with the Cost Accounting Standards is due, in part, to the laboratory's not having developed a written policy for classifying costs as

direct or indirect. Such a policy was issued in September 1993, representing a required first step to ensuring that the laboratory complies with the Cost Accounting Standards.

Improperly Classified Indirect Costs

We identified at least \$10 million of direct program costs that were wholly or primarily caused by or incurred for the benefit of programs directed by DOE's Assistant Secretary for Defense Programs but that were included in overhead in fiscal year 1991. Similar costs for the same activities were also included in the overhead pool in fiscal years 1992 and 1993. These program costs should have been charged directly to defense programs in their entirety. However, they were inappropriately allocated to all programs via the overhead pool.¹

For example, the overhead pool included costs that resulted from the operation and maintenance of Site 300, a remote facility that supports the high-explosive test needs of defense programs. In fiscal year 1991, the overhead pool contained nearly \$5.5 million of costs in accounts identified specifically with Site 300, plus other Site 300 costs that financial reports do not identify because they were included in accounts that also contain costs for the main Livermore site. Site 300 activity is controlled by the laboratory Associate Director for Defense Systems/Nuclear Design, and all but 3 of the 85 facilities at Site 300 are currently occupied by programs under his guidance or by organizations that provide support services to Site 300.

A laboratory official told us Site 300 costs are charged to overhead because Site 300 is considered to be an integral part of the laboratory that is treated in the same manner as the main Livermore site. However, the fact that defense programs cause nearly all Site 300 facility costs but pay only a portion of the costs through overhead allocations is inconsistent with the Cost Accounting Standards' requirement that costs be distributed in reasonable proportion to the causal or beneficial relationship of the costs to programs. Furthermore, in a July 1993 report, a laboratory indirect cost review team questioned whether including Site 300 costs in overhead provides an inappropriate subsidy to defense programs. In September 1993, laboratory officials told us that a study to examine the charging of Site 300 costs has been scheduled for fiscal year 1994.

¹In 1991, defense programs were allocated about 50 percent of total overhead costs, with the balance allocated to nondefense programs, such as Environmental Restoration and Waste Management.

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In addition, the overhead pool included costs caused by the need for a dedicated security force to protect special nuclear materials in Defense Program's Weapons Research and Development facility known as "Superblock." In fiscal year 1991, overhead cost accounts identified with Superblock security were charged over \$3.5 million. The resource manager for the accounts estimated the total costs were closer to \$5 million if the Superblock security costs commingled in accounts with other laboratory security costs were included. The Controller explained that Superblock costs have traditionally been considered an integral part of the laboratory's total security scheme, and therefore appropriate to overhead. However, as the focus of the laboratory's research has shifted to areas other than defense, the equitability of charging these costs to overhead has received greater attention. The July 1993 report by the laboratory indirect cost review team recommends that these costs be removed from overhead and charged directly to defense programs. Subsequently, laboratory officials informed us that Superblock costs will be charged directly to defense programs beginning in fiscal year 1994.

The costs of a laboratory defense program employee who was assigned to work for a defense program at another DOE laboratory were also included in overhead. For fiscal years 1991 and 1992, \$755,000 in costs associated with this employee's assignment had been charged to an overhead cost account. Similarly, in fiscal year 1991, five laboratory staff were assigned to provide assistance to DOE's Defense Programs Deputy Assistant Secretary for Military Applications. The staff performed work at DOE's Maryland site in Germantown and at various weapons production plants. In fiscal years 1991 and 1992, nearly \$1.1 million in costs for the activities of these five staff had been included in the Livermore overhead pool. Regarding both examples, laboratory representatives stated that the Director approved the assignments because he viewed them as being "institutional costs" of general benefit to all laboratory programs and, therefore, appropriately charged to overhead accounts. However, the representatives could not clearly describe the benefit derived by all programs in either of these cases.

When costs are not properly classified, one program subsidizes another. In the cases we identified, for example, nondefense programs paid a portion of the costs and had less funding available to apply to their program objectives. Conversely, the funding for defense programs was supplemented. As a result, Congressional funding decisions for individual DOE programs, such as Weapons Research, Development, and Testing, or Environmental Restoration and Waste Management, are not adhered to.

Our review included about 200 of the laboratory's approximately 2,700 overhead accounts, and it is therefore possible that other direct program costs in overhead are providing inappropriate subsidies to programs.

A Written Accounting Policy Had Not Been Established

The laboratory's lack of compliance with the Cost Accounting Standards is attributable, in part, to the fact that the laboratory had not established or implemented a written policy for the classification of costs as direct or indirect, as required by its contract.² Prior to September 1993, the laboratory used an informal "cost assignment philosophy" which defined the overhead portion of indirect costs as those that provide a "general benefit to the institution as a whole, rather than just an individual program." Compared with the principles contained in the Cost Accounting Standards, this philosophy allowed for broader interpretation of which costs should be classified as direct or indirect. For example, this philosophy did not specifically require compliance with all the Cost Accounting Standards' principles, such as the causal or beneficial requirement discussed above. During our review, Controller's office officials said that this philosophy was sufficient for laboratory management and staff to understand which costs should be charged to indirect cost accounts and which costs should be charged to direct accounts.

When we discussed our report findings with laboratory officials, the officials maintained that the laboratory's policies on classifying costs as direct or indirect were contained in Livermore's Cost Accounting Standards Board Disclosure Statement that discloses the laboratory's cost accounting practices to DOE. However, in addition to requiring the disclosure statement for external oversight purposes, the Cost Accounting Standards also require contractors to have written accounting policies that provide guidance to contractor employees for classifying costs as direct or indirect. The laboratory's disclosure statements we reviewed contained errors and did not contain the laboratory's criteria for determining whether costs are charged directly or indirectly, as required. After we brought this deficiency to the laboratory's attention, the laboratory revised its disclosure statement in February 1993 to include such criteria.

In September 1993, the laboratory issued a new policy for the classification of direct and indirect costs, using definitions similar to those in the Cost Accounting Standards and requiring compliance with the

²Noncompliance with Cost Accounting Standards is also partially attributable to DOE's past inattention to contractor indirect costs, which is discussed further in Chapter 3.

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causal or beneficial requirement. As such, the policy represents a necessary first step to ensuring compliance with the standards. The policy also provides that the Controller's Organization will determine the classification of laboratory costs. Centralizing this responsibility should help ensure that direct program charges will not be included in indirect cost pools. However, the ability of the Controller's Organization to ensure that all costs are properly classified at the laboratory will be impeded until the accounting weaknesses discussed later in this chapter are addressed.

Construction Costs Were
Also Charged Improperly
to Overhead

In addition to defense program costs, we found that in at least one case, the laboratory used \$700,000 in overhead funds for a construction project instead of using funds that were specifically appropriated for such projects. In doing so, it violated DOE's direction and principles of federal appropriations law.

Specifically, DOE Order 2200.6A, Chapter VI, establishes the accounting and financial policy relevant to the management of DOE's plant and capital equipment charges, which include "General Plant Project" funds. General Plant Project construction funds are appropriated by Congress to provide funding for minor projects of a general nature required in the performance of the laboratory's DOE mission. According to the order, each General Plant Project—the total cost of which may not exceed the Congressional authorization of \$1.2 million—should result in a complete and usable facility. While such funds are appropriated by Congress on the basis of the descriptions of projects in DOE's approved budget submission, DOE allows changes in the scope, schedule, and order of the projects in recognition of changes in laboratory priorities and requirements.

The order also provides guidelines for distinguishing activities that should be paid with Plant and Capital Equipment funds (which include General Plant Project funds) from activities that should be charged to operating expense.³ While the order specifies that normal maintenance and repair costs may be charged to operating expense, construction costs that result in a "betterment" are to be classified as plant and capital equipment expenditures. "Betterments" are defined in the order as improvements to plant and capital equipment that result in better quality, higher capacity, or extended useful life and include, for example, converting a facility from one use to another.

³Operating expense includes overhead and all other costs not specifically funded via plant or capital equipment appropriations.

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In fiscal year 1991, the laboratory charged about \$700,000 to operating expense via the overhead pool to remodel and furnish a building to provide quarters for a DOE-required review organization. According to laboratory officials, they charged the cost of the project to overhead since, in their opinion, it met DOE's requirements for doing so. However, General Plant Project funds should have been used for what was a betterment to the facility, rather than charging the cost to overhead as an operating expense.

Specifically, the rehabilitation of the building, which was described by a laboratory official as "uninhabitable," included the demolition of internal walls, the installation of new plumbing, new wiring, a new air conditioning system, and new modular office furnishings. Such changes clearly go beyond the scope of normal maintenance or repair work that could appropriately be charged as operating costs. Consequently, the laboratory should have reprioritized its General Plant Projects to allow the use of those funds for the remodeling, or postponed the remodeling until such funds were available.

Similar funding irregularities have previously been identified as a problem at the laboratory. Prior to our audit, the Secretary of Energy asked all of DOE's field offices to report financial irregularities associated with General Plant Project funds. As a result of this review, three Livermore projects with funding irregularities were reported by the Secretary to the Congress, including one project that the laboratory was planning to fund with a combination of both General Plant Project and operating funds.

When we brought the \$700,000 construction project example to the attention of DOE's San Francisco office, officials indicated that General Plant Project funds would have been the appropriate source of funding for this project rather than overhead. Furthermore, they indicated that the Livermore Laboratory has since instituted a rigorous review process for projects with total costs in excess of \$300,000 that are proposed to be funded by operating expenses. Under this process, DOE's approval is required before operating funds can be used for such projects. These officials indicated that, had this or a similar project been submitted for approval under the new review process, DOE's San Francisco office would not have allowed overhead funds to be used. The new review process is an appropriate corrective action. However, DOE's ability to ensure that all appropriate projects are brought to its attention for review and approval is negatively impacted by the accounting deficiencies we found at the Livermore Laboratory, discussed below.

Controls Needed to Ensure Reliable Accounting Information Are Not in Place

The financial management controls needed to ensure reliable accounting information are not in place at the Livermore Laboratory. Widely accepted financial management principles dictate that financial systems be clearly documented, up-to-date, and readily available for examination to provide a comprehensive understanding of the system. In addition, key duties should be separated among individuals to reduce the risk of error, waste, or wrongful acts. However, the laboratory uses a decentralized management structure that does not include a fully documented accounting system nor the adequate separation of duties. As a result, the information generated from the systems is unreliable and, therefore, of limited use to management for planning or control purposes or for independent oversight.

The laboratory's financial management structure does not require complete documentation of its accounting system nor sufficient separation of duties. Among other things, system documentation provides the basis for controls to ensure expenditures are charged to appropriate accounts. Additionally, key duties and responsibilities in authorizing, processing, recording, and reviewing transactions should be separated among individuals to reduce the risk of error, waste, or wrongful acts.

At the laboratory, accounting functions, such as assigning and maintaining account titles and determining the costs that will be charged to specific accounts, have been delegated to over 100 resource managers within both overhead and direct program areas. However, the laboratory does not (1) maintain account documentation that identifies the specific purposes of the individual accounts—that is, that defines the costs that are proper for each account, or (2) require the resource managers to document the specific purposes of their individual accounts beyond assigning account titles.⁴

In addition, in some cases resource managers are also responsible for validating charges to the accounts without independent oversight. As such, the same individual is responsible for naming and assigning costs to accounts as well as validating the costs charged to the individual accounts under their control. Moreover, independent oversight to ensure costs are charged to the correct accounts is not performed. For example, although account charges and changes to account names or numbers are processed through the Finance Department, without documentation of the authorized account purposes, Finance cannot confirm that the charges are

⁴The financial system does classify its accounts by (1) the type of account, such as asset or liability, and (2) the DOE program code that relates to DOE's funding sources. The system also classifies expenditures by type of expense, such as labor or procurement.

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being made to the proper accounts. In addition, although Finance does verify that changes to account names and numbers are made by those with delegated authority, they do not check to make sure the changes are appropriate or necessary. As a result, the laboratory cannot ensure that costs charged to indirect cost accounts are in fact related to the accounts' stated purposes.

We found a number of instances where the costs of specific activities were not readily identifiable or, in some cases, were represented incorrectly in Livermore's accounting system. Specifically, in our review of 200 of the 2,700 laboratory overhead accounts, we found expenditures that did not relate to the account titles and thus which provided misleading accounting information. Examples include protective force training expenses and the costs of weapons parts and ammunition in an account titled "Emergency Meal Chits" and charges for five laboratory staff assigned to DOE's Office of Military Applications, discussed earlier in this chapter, in an account titled "Lab Business Center."

In addition, numerous accounts have nondescriptive account titles such as "Project A" or "Project 1" which do not provide any information on the nature of the costs in the account. In fiscal year 1991, over \$9 million was charged to overhead accounts with such titles by several overhead organizations. While nondescriptive titles alone do not represent an internal control weakness, such accounts are a problem if adequate documentation of the authorized purposes of the individual accounts is not maintained. This is the case at the laboratory in which individual account titles serve as the only description and documentation of the purpose of each account, as discussed above. As a result, employees are authorized to use accounts with no documented purpose and the nature of the charges, when incurred, is obscured.

An explanation given by one resource manager was that such accounts were used for unanticipated, emergency expenses. However, a number of the accounts we examined did not include expenses that fit the rationale offered. For example, an account titled "Project N" contained the costs of laboratory color guard performances at laboratory holiday observances and the California State Fair Parade.

The reliability of the laboratory's financial information is also weakened by the frequent changes to account titles that occur. Such changes increase the likelihood that costs may be charged to the wrong accounts. Furthermore, frequent account changes also increase the likelihood that

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inappropriate overhead costs may not be detected. For example, the year-end indirect cost account listing from the laboratory's general ledger that was the basis for our initial account selection did not identify any account for the costs of the five laboratory staff assigned to DOE's Office of Military Applications (OMA). Instead, we found the OMA support costs that should have been charged directly to defense programs in an overhead account titled "Lab Business Center."

The resource manager who is responsible for these accounts told us that he changed the account name from "DOE-OMA Support" to "Lab Business Center" when he was told the costs for the five staff would be paid for by defense programs and he decided to use the account for the business center costs. When defense programs did not pay the staff costs, the resource manager changed the name back to "DOE-OMA Support" one month later, and opened a separate account titled "Lab Business Center." However, the resource manager had already established another account during that month that was also titled "Lab Business Center." All of the changes were processed through the Finance Department with no explanation as to why the account title changes were being made. This example illustrates the ease with which the nature of expenditures at the laboratory can be obscured, for the short-term or the long-term, with or without any intent to conceal the nature of the charges.

Finally, there is no assurance that the accounts designated by a resource manager for a specific purpose or function actually represent the total costs of that function. In order to identify the full costs of various laboratory functions, management and auditors have to rely on individual resource managers to identify all the accounts that relate to specific functions without the benefit of systems documentation that could provide a validation that all appropriate costs were provided. For example, an account titled "Superblock" contained \$291,000 in costs associated with Superblock, Livermore's highest security area. However, another account titled "Project C" contained an additional \$3.4 million of Superblock security charges, and according to the resource manager, charges for this activity are also included in other accounts.

Similarly, in fiscal year 1991 the laboratory's Public Affairs Office charged \$3 million to the accounts the resource manager established for this office. However, we found about \$300,000 in additional Public Affairs expenses that were charged to numerous other accounts other than those designated for that office, such as \$30,000 of the public affairs director's salary and expenses charged to an account for expenses relating to the

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laboratory director's office. Although accounts assigned to the Public Affairs Office showed total expenditures of \$3 million in fiscal year 1991, the laboratory actually spent at least an additional 10 percent on Public Affairs' expenses. Other costs related to public affairs may also be included in other accounts that we did not review. As a result, the accounting system does not readily identify, and may misrepresent, the costs for laboratory activities such as public affairs.

Laboratory officials stated that, as part of the annual budget process, the laboratory provides DOE with 29 "crosscuts" that cover the total laboratory costs for primary functions of interest to DOE. However, the crosscuts do not include public affairs. Furthermore, the lack of account documentation supporting the crosscut information provided to DOE reduces the reliability of that financial information.

The accounting deficiencies discussed above all stem from the lack of adequate accounting controls and result in the laboratory not being able to ensure the reliability of its financial information. Consequently, accounting information generated from the financial systems is of limited use to management for planning or control purposes or for independent oversight. In addition, the use of accounts with vague titles and the laboratory's inability to confirm that accounts contain only charges proper for each account increase the potential for the waste and abuse of taxpayer resources.

In response to our findings, the laboratory's Finance Manager determined that the laboratory needed to strengthen its account documentation requirements to clarify accounting information. The manager directed that as of October 1, 1993, all new account titles must clearly reflect the purpose of the account and all account opening requests must include a statement on the purpose of the account.

Conclusions

The Livermore Laboratory expends over \$1 billion of taxpayers' dollars annually to conduct DOE's research and development activities. Over \$436 million of this amount pays for indirect cost activities. Good accounting controls are essential to ensuring that these funds are spent in compliance with DOE's requirements, such as the federal Cost Accounting Standards, and that taxpayer dollars are spent efficiently and effectively—whether for direct or indirect cost activities. However, the laboratory's financial management controls are not adequate for proper indirect cost management.

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First, a review of only 200 of the laboratory's 2,700 overhead accounts shows that not complying with the Cost Accounting Standards has resulted in the Livermore Laboratory improperly using overhead funds to subsidize defense programs at the expense of nondefense programs. Now that the laboratory has established a cost classification policy, DOE needs to ensure that the laboratory effectively implements the new policy and that all of the laboratory's indirect cost accounts contain only expenditures that comply with the Cost Accounting Standards.

Second, additional internal controls are needed to enable the laboratory's decentralized financial management structure to provide reliable financial information and reduce the potential for waste and abuse. The account documentation requirements recently established by the laboratory for new accounts provide only a partial solution. Account documentation is needed for all accounts so that the Finance Department can provide independent oversight of the resource managers to ensure that costs are charged to the appropriate accounts.

DOE and the laboratory have taken steps to prevent additional financial irregularities regarding construction funding. Therefore, we do not have recommendations in this area. However, DOE's ability to ensure the laboratory's compliance with the requirements will be undermined until the laboratory's accounting weaknesses are corrected. For example, DOE is relying on the laboratory to identify all appropriate cases for its review and approval. However, because the nature of expenditures may be easily obscured, DOE cannot be assured that the laboratory is bringing all appropriate cases to its attention.

Recommendations

To ensure compliance with the federal Cost Accounting Standards, we recommend that the Secretary of Energy direct the Chief Financial Officer to ensure that direct costs included in the Livermore Laboratory's overhead pool are removed.

In order to ensure the reliability of the Livermore Laboratory's accounting information, we recommend that the Secretary of Energy require the laboratory to develop and implement adequate internal controls to ensure the reliability of its financial information, including fully documenting its account structure to identify the authorized purpose of each account and separating key duties to ensure that charges to accounts are in conformance with the authorized purposes.

Implementation of Recent Indirect Cost Oversight Initiatives Is Underway

DOE has taken steps to provide oversight of contractor indirect costs since 1991 in response to a number of factors, such as criticism by the DOE Inspector General. However, reviews conducted in 1992 by nine DOE offices did not identify the direct program costs included in overhead pools that reviews by GAO, the DOE Inspector General, and a certified public accounting (CPA) firm determined did not comply with the federal Cost Accounting Standards. The report by DOE's San Francisco office on the Livermore Laboratory contained factual errors and omissions that resulted in the operations office providing misleading and inaccurate information to headquarters about the laboratory's indirect cost system. For example, the report stated that the laboratory was complying with Cost Accounting Standards, although the scope and methodology of the review was not adequate to assess compliance.

Currently, DOE's operations offices are implementing indirect cost review requirements established in January 1993 to ensure, among other things, the reasonableness of contractors' indirect costs. The success of the review program hinges on operations offices conducting effective reviews that examine and assess the individual components of contractors' indirect costs. At this time it is too early in the oversight program to determine if the reviews will be adequate to meet DOE's objective of ensuring the reasonableness of contractors' indirect costs. For example, a recent review by DOE headquarters of DOE's San Francisco office that included an examination of the office's indirect cost oversight activities did not examine the indirect cost reviews conducted according to the January 1993 guidance because the reviews were not yet completed.

Oversight of Contractor Indirect Costs Initiated in 1991

DOE's San Francisco Operations Office performed little oversight of Livermore's sizeable indirect costs until 1991. Prior to this time, stemming from an historical management approach of least interference that presumed that the contractors had the technical expertise and the business acumen to operate DOE's facilities, DOE had not established oversight requirements for contractors' indirect costs. For example, DOE did not systematically conduct reviews of indirect costs to ensure that the costs were reasonable, and contractors did not have to report on overhead on a standardized basis or provide DOE with detailed program plans for overhead activities prior to execution.

Since 1991, however, DOE has taken steps to provide oversight of contractor indirect costs in response to a number of factors, such as criticism by the DOE Inspector General and a congressional subcommittee,

internal reviews identifying oversight deficiencies, and DOE management concerns about the size and composition of contractors' indirect costs. For example, in 1990 DOE's Inspector General reported that M&O contractors' indirect costs were not reported, reviewed, and monitored by DOE at a detailed level.¹ As a result, the Inspector General concluded that important services may not be funded or funds may be spent for unneeded services. This oversight deficiency was a key issue discussed at a July 1991 Congressional hearing on the management of DOE's Lawrence Livermore and Lawrence Berkeley laboratories by the University of California.²

Shortly after the congressional hearing, a DOE Controller's Compliance Review of the San Francisco Operations Office also highlighted for DOE management indirect cost problems specific to the Livermore Laboratory.³ DOE's compliance report noted that the budget reviews conducted by DOE's San Francisco office are at a summary level and thus cannot typically detect specific instances of improper or imprudent uses of overhead funds. DOE's report stated that congressional, DOE Inspector General, and GAO "allegations of questionable uses of overhead funding, primarily at LLNL" (Livermore) have heightened the need to increase oversight of contractor overhead, and the report included a recommendation for DOE's San Francisco office to initiate detailed reviews of contractor overhead costs. While acknowledging that the staff levels in the San Francisco office may not be adequate to undertake a detailed review at that time, DOE's compliance report indicated it was appropriate for DOE's San Francisco office to initiate a limited overhead review effort as soon as feasible, focusing on those overhead areas deemed most vulnerable.

In addition to specific problems associated with indirect costs at the Livermore Laboratory, in 1991 former DOE Secretary Watkins expressed general concern about the size, growth, and composition of overhead activities and the fairness of overhead charges being applied to DOE's Environmental Restoration and Waste Management program. His concerns were that the environmental program may be paying for overhead costs that it neither caused nor benefitted from—that is, that the causal and beneficial principle was not being followed.

¹Report on the General Management Inspection of the San Francisco Operations Office, U.S. DOE Office of Inspector General, DOE/IG-0290, September 20, 1990.

²Hearing before the Subcommittee on Investigations and Oversight of the Committee on Science, Space, and Technology, U.S. House of Representatives, July 31, 1991, No. 57.

³Controller's Compliance Reviews are periodic reviews of operations offices by headquarters to determine adherence to DOE's policies and procedures and sound financial management practices.

Other factors contributing to DOE's decision to oversee contractor indirect costs include the "culture change" initiatives of the former DOE Secretary that were directed at making the stewardship of DOE's resources more active and making DOE's contractors more cost-conscious and responsive to DOE, and passage of the Chief Financial Officers Act of 1990. The Act calls for improvement in each federal agency's systems of accounting, financial management, and internal controls to ensure the issuance of reliable financial information and to deter fraud, waste, and abuse of government resources.

In response to these various factors, DOE took a number of steps to improve oversight of indirect costs. For example, in September 1991, DOE promulgated DOE Order 2200.13 that provided, for the first time, DOE policy and general procedures for operations offices to follow in overseeing the financial management activities of its management and operating contractors, including indirect costs. Among other things, the DOE order requires operations offices to review contractors' cost distribution systems to provide assurance that the overhead pools are properly accumulated, controlled, and distributed and that similar overhead costs are treated consistently throughout the contractor's organization. The order focuses on broad oversight objectives. For example, while it requires DOE operations offices to determine whether the overhead pools are properly accumulated and distributed, the order does not identify the specific criteria to be used, such as the causal and beneficial principles of the federal Cost Accounting Standards.

DOE Order 2200.13 also provides that the DOE Chief Financial Officer is responsible for developing and maintaining DOE policy and procedures pertaining to financial management of DOE's contractors and for assessing field chief financial officers' compliance regarding the financial management oversight requirements defined in the order. DOE's Chief Financial Officer⁴ developed more detailed oversight requirements for the operations offices shortly after the order was issued. Properly conducted, the indirect cost action plans would enable the operations offices to meet a number of the general oversight objectives identified in the order.

Specifically, on December 31, 1991, DOE's Under Secretary approved two action plans proposed by the Chief Financial Officer in response to Secretary Watkins' request for an independent review of contractor overhead charges to (1) ensure that the environmental restoration

⁴DOE's Chief Financial Officer and the Chief Financial Officer of DOE's San Francisco office cited in this report were the acting chief financial officers during our review.

program was being assessed appropriate overhead charges and (2) determine if contractor overhead costs are reasonable and to identify options for reducing overhead costs. The action plans addressed the Secretary's concerns in two phases. The first plan, directed at concerns about the composition of overhead costs, called for independent reviews of contractors' indirect costs to ensure that overhead charges applied to the environmental restoration program were equitable and in accordance with generally accepted accounting principles and the Cost Accounting Standards. The reviews were completed in 1992.

The second plan, addressing concerns about the reasonableness of contractors' overhead costs, outlined a number of activities to achieve the objective of ensuring that overhead activities of the DOE contractors are held to the minimum necessary for efficient and safe operations. The activities to be performed included (1) a detailed review of the overhead activities of the DOE contractors to determine whether or not these charges are reasonable and to identify opportunities for reducing overhead costs, as well as annual operations office reviews of actual overhead transactions and compliance reviews of overhead by the Chief Financial Officer and (2) the implementation of a new budget process for overhead to alleviate deficiencies in DOE's budgeting process and to ensure proper federal oversight of these activities. Unlike the first plan, which required one-time reviews, the second action plan includes some tasks that are to be conducted on a recurring basis, such as the budget reviews and reviews of overhead.

The actions taken by DOE's operations offices to implement the Chief Financial Officer's two indirect cost action plans are discussed below. The adequacy of the implementation of the first action plan is addressed DOE-wide because our work at DOE's San Francisco office is augmented by two independent audits that provide information on implementation at a number of other DOE sites. Information on the implementation of the second action plan is limited to our work conducted at DOE's San Francisco office and at the Livermore Laboratory.

DOE's Reviews Did Not Identify Direct Program Costs Included in Overhead

The reviews conducted by DOE's operations offices in 1992 to determine if the principles of the Cost Accounting Standards were being followed did not achieve DOE's objective. For example, the review by DOE's San Francisco office did not identify noncompliance with the Cost Accounting Standards similar to our findings discussed in chapter 2 of this report because the review was not adequate to assess compliance. Further, an

independent CPA firm that examined the reviews conducted by four other operations offices found that the reviews conducted by three of those offices could not be relied upon. A January 1993 report⁵ by DOE's Inspector General on fiscal year 1991 costs also found that DOE's contractors have charged material direct program costs to indirect cost accounts. The Inspector General attributed the problems to inadequate DOE oversight and made four recommendations to address the oversight deficiencies, such as specifically requiring all M&O contractors to adhere to the causal-benefit principle.

DOE San Francisco Did
Not Identify
Noncompliance With Cost
Accounting Standards

Implementation of the Chief Financial Officer's first action plan to determine compliance with Cost Accounting Standards did not achieve its objective. In early 1992, the San Francisco Operations Office was required to perform an objective and comprehensive baseline review of Livermore's indirect costs; 8 other DOE offices were required to conduct reviews of 13 other large management and operating contractors' overhead distribution systems. The main purpose of the reviews was to ensure that overhead costs have a causal and beneficial relationship to programs. The Chief Financial Officer's instructions indicated that a key concern was that some programs were paying costs that should be charged directly to other programs. The instructions also indicated that some of the operations offices reviews would be subject to independent review, and therefore all offices were instructed to maintain complete documentation of the reviews.

The report by DOE's San Francisco office, prepared in response to the Chief Financial Officer's instructions, contained several factual errors and omissions that resulted in the operations office providing misleading and inaccurate information to headquarters about the adequacy of the Livermore Laboratory's indirect cost system. Most significantly, DOE's San Francisco Operations Office reported to DOE headquarters in March 1992 that the laboratory's overhead cost distribution system was "appropriate, in accordance with the Cost Accounting Standards, and that there is a causal and beneficial relationship to programs receiving the allocations." However, we found that the review by DOE's San Francisco office was not adequate in scope and methodology to determine whether the overhead costs have a causal and beneficial relationship to programs. As a result, DOE's San Francisco office did not identify any causal and beneficial problems along the lines of our findings discussed in chapter 2.

⁵Department-Wide Audit of Control and Management of Indirect Cost, U.S. DOE, Office of Inspector General, DOE/IG-0318, January 1993.

Even though the main purpose of the review was to examine the individual components of overhead to determine if causal and beneficial principles were being followed, the supporting workpapers did not include any detailed information on the composition of the Livermore Laboratory's indirect costs. Rather, the reviewers primarily examined the reports of prior DOE reviews of the laboratory's indirect costs and financial reports from the laboratory that identified the components in broad categories, such as "environmental protection" and "plant engineering." The material examined by DOE's San Francisco office did not include any documentation that identified in detail the nature of the charges made to these multi-million dollar categories, such as the names of the accounts included in each category. In contrast, we identified a number of inappropriate charges by inquiring about the charges in individual accounts.

Officials in DOE's San Francisco office stated the time allotted for this review—six weeks from the time of request to the report's due date—was inadequate for conducting a thorough review. Thus these officials stated that their review was not based on a direct examination of indirect cost information. For example, the report from DOE's San Francisco office states that its review was accomplished through an analysis of prior reviews of Livermore's indirect costs and limited interviews with Livermore staff. However, this caveat is not sufficient to support an affirmative finding of no deficiencies when in fact sufficient data was not examined upon which to base an opinion.

Furthermore, the report overstates the depth and scope of prior reviews that were relied upon. Specifically, the report by DOE's San Francisco office stated that it had reviewed many "comprehensive and objective baseline reviews of the cost accumulation and distribution systems" previously conducted at Livermore and that none of these comprehensive reviews had identified indirect cost allocation problems or inefficient operations. However, the completed reviews⁶ cited were not comprehensive. For example, a 1991 Contractor Business Management Systems Review⁷ report cited by DOE's San Francisco office did include, among numerous other elements, indirect costs. However, this review was established to be "macro" in nature and was not intended to audit or examine the numerous elements reviewed in depth. Similarly, the budget

⁶DOE's San Francisco office also cited the GAO review that was on-going at that time and an Inspector General review that was terminated before completion.

⁷The purpose of DOE's management system review was to assess the status of the laboratory's business management systems.

validation reviews⁸ cited by DOE's San Francisco office included only limited review of indirect costs. By overstating the scope of the prior reviews relied upon, DOE's San Francisco office provided inappropriate assurances to DOE headquarters about the laboratory's indirect cost allocation system.

Furthermore, the only completed in-depth review of indirect costs, conducted by the University of California's internal audit group in 1988, was not included in the review because it was more than 2 years old. As a result, deficiencies identified in 1988 which we found were still occurring were not reported to DOE headquarters. The 1988 review concluded that the process of determining how indirect costs will be distributed was not always effective and that some indirect cost expenses could be better controlled and managed.

Other DOE Offices Did Not Identify Cost Accounting Standards Problems

The reviews of 13 M&O contractors by other DOE offices also did not detect noncompliance with the *Cost Accounting Standards* identified in independent reviews. For example, all of the DOE reviews except one reported contractor compliance with the causal and beneficial principle. However, an independent CPA firm retained by the Chief Financial Officer to determine if the reports by DOE's operations offices could be relied upon to provide assurance that indirect costs are allocated in compliance with the *Cost Accounting Standards* reported that a majority of the reviews examined could not be relied upon. Specifically, the CPA firm examined the reviews conducted by four operations offices, not including San Francisco, and found that the conclusions reported by three of the offices were not adequately supported. The CPA firm stated it could not rely on the reviews of the Savannah River, Rocky Flats, and Oak Ridge offices because of inadequate documentation to support the conclusions.

Furthermore, the CPA firm tested the underlying workpapers on a sample basis to determine, among other things, if costs in selected pools were, in fact, indirect costs. The firm found instances of costs that did not meet the causal and beneficial criteria of the *Cost Accounting Standards* and recommended that these specific instances be corrected. In addition, the firm reported that DOE contractors were not following the causal and beneficial standard for security costs. The report noted that this could have a significant impact on the allocation of costs among programs and included recommendations to correct this situation. In September 1992,

⁸The budget validation reviews by DOE's San Francisco office are to support the office's review and validation of the budget estimates developed and submitted by the Livermore Laboratory.

the Chief Financial Officer required the operations offices to take a number of steps to address the CPA firm's recommendations, such as evaluating the process for allocating security costs to DOE programs to ensure that the proper causal or beneficial relationship exists.

Similarly, DOE's Inspector General recently reported on the fiscal year 1991 indirect costs of four contractors overseen by DOE's Albuquerque, Fernald, and Oak Ridge offices. He found that the four contractors either charged material direct program costs to indirect cost accounts or did not otherwise ensure that a causal or beneficial relationship was maintained. The Inspector General determined that these problems occurred because DOE had provided inadequate oversight in this area and made several recommendations for corrective actions to improve DOE's oversight, including requiring DOE's Chief Financial Officer to implement (1) appropriate department-wide guidance requiring all M&O contractors to adhere to the causal-benefit principle for indirect cost allocations and (2) periodic reviews to ensure compliance with the causal and beneficial principle of allocating indirect costs.

In response to the first recommendation, DOE management agreed to issue guidance on the causal and beneficial principle. With respect to the need to conduct periodic reviews, DOE management concluded that, even though it does not specifically address the causal and beneficial principle, the oversight requirements contained in DOE Order 2200.13 would comply with the Inspector General's recommendation for reviews to determine compliance with this principle. Therefore, no additional actions are planned to address the Inspector General's recommendations.

Second Indirect Cost Action Plan Is a Multi-Year Process

Implementation requirements for the Chief Financial Officer's second action plan, focusing on the reasonableness of contractor indirect costs, were established in 1992 and 1993. However, the actions taken by DOE's San Francisco office to implement the second action plan are not far enough along for us to assess whether they will be sufficient to resolve the efficiency concerns the indirect cost plan was designed to address. That is, current plans are for Livermore's indirect costs to be reviewed over a four-year period from fiscal years 1993 through 1996. As of September 1993, the reports from the initial reviews conducted by DOE's San Francisco office had not yet been completed. The review requirements were initially established in 1992, with more detailed requirements established the following year.

Specifically, implementation of the second action plan was initiated on March 4, 1992, when the Chief Financial Officer requested a comprehensive review of contractors' indirect costs to determine the reasons for the growth in the overhead activities of the M&O contractors and to recommend actions which could be taken to reduce overhead costs. At this time the Chief Financial Officer promulgated new reporting requirements to make the costs for activities such as environment and safety and health visible by requiring contractors to report their total costs by function. The new reporting requirements also established ten major categories for reporting overhead, such as management and administration, maintenance, and information/outreach activities.

The comprehensive reviews cited in the action plan, however, were not conducted in 1992. According to the Chief Financial Officer of DOE's San Francisco office, DOE's primary focus in 1992 was on reviewing the new functional and overhead cost reports prepared by the contractors. In addition, DOE's M&O contractors were asked to identify steps that could be taken to reduce overhead by 10 percent. Furthermore, while some detailed reviews of indirect costs were planned, in 1992 DOE's San Francisco office did not initiate an indirect cost review because of staffing constraints and because GAO's review was being conducted at that time.

However, in mid-1992 DOE's San Francisco office established a Financial Review Division. As of September 1993, the Financial Review Division had twelve employees, seven of whom are involved in the indirect cost reviews. The Chief Financial Officer of DOE's San Francisco office said that one staff member was dedicated solely to examining indirect costs, while the other six at times will be reviewing indirect cost matters in conjunction with their reviews of specific areas at all of its contractors.⁹

More specific instructions that implement the second action plan were issued in January 1993 when DOE's Chief Financial Officer issued "Allocable (Indirect) Cost Review Guidance" and formalized the indirect cost review process to be used by DOE. The review process, an excerpt from DOE's Field Budget Formulation Handbook, was incorporated into DOE's fiscal year 1995 budget formulation instructions that were issued on January 15, 1993.

⁹DOE's San Francisco office has management oversight responsibility for the Lawrence Livermore and Lawrence Berkeley Laboratories, operated under contract with the University of California; the Stanford Linear Accelerator Center, operated by Stanford University; and the Energy Technology Engineering Center, operated by the Rockwell International Corporation.

The new indirect cost review process includes (1) approval of contractors' cost accumulation and distribution policies and practices, (2) annual indirect cost budget reviews to be conducted by operations offices during the first quarter of the fiscal year, and (3) ongoing review and verification of contractors' cost accumulation and distribution practices, with specific minimum review requirements, such as evaluating the reasonableness of costs budgeted and incurred.

Among other things, the reviews of contractors' cost distribution practices, e.g., indirect costs, represent the primary tool DOE will have to meet the objectives of DOE's second action plan—that is, to determine whether contractor indirect costs are reasonable. These reviews will provide detailed information on the specific activities being conducted. Such information is needed to determine if indirect cost activities are managed efficiently and effectively. In contrast, the budget reviews to be conducted are, by design, broad-based, and do not delve into the specific components of large multi-million dollar indirect cost categories, such as environment and plant engineering. Instead, the budget reviews are to assess the overall reasonableness of the budget levels.

As a result of the new indirect cost review process issued with the fiscal year 1995 budget formulation instructions, DOE's San Francisco office prepared an addendum to its five-year plan defining its projected financial management oversight activities for M&O contractors that was originally issued in January 1993. The initial plan, prepared to comply with DOE Order 2200.13 oversight requirements, included general indirect cost oversight tasks to be conducted each year, but did not identify the specific indirect cost components to be reviewed. The addendum, prepared to comply with the new review guidelines, is specific. For Livermore, the current plan calls for reviews in fiscal year 1993 of the indirect cost categories of Executive Direction, Safeguards and Security, and Safety and Health.¹⁰ Four reviews are planned each year during 1994, 1995, and 1996 so that at the end of 1996, all major components of Livermore's indirect costs are to be reviewed in detail.

According to the Chief Financial Officer of DOE's San Francisco office, as of September 1993, some of the reviews planned for fiscal year 1993 have been conducted, but the reports have not been finalized. For example, the report of the review of Livermore's Executive Direction is in draft form and the Safeguards and Security report is being drafted. In addition, the

¹⁰Executive Direction is a DOE indirect cost category that includes costs associated with the highest level of M&O contractor management, such as the laboratory director and immediate staff.

Safety and Health review that was planned for fiscal year 1993 was deferred because of two unscheduled financial reviews at the laboratory. The Safety and Health review has not yet been rescheduled. The DOE San Francisco Chief Financial Officer also indicated that an overall review of the cost distribution system is underway.

DOE's Chief Financial Officer is requiring that the indirect cost review plans be updated annually. In addition, DOE's Chief Financial Officer monitors the financial management oversight activities of its operations offices, including the indirect cost tasks. For example, as part of the Controller's Compliance Review of the San Francisco office in August 1993, the 5-year indirect cost review plan was examined. The San Francisco Chief Financial Officer said that while DOE headquarters thought the plan was good, questions were raised about how the plan would be accomplished given their current staffing. The compliance review examined other aspects of DOE San Francisco's oversight of contractor indirect costs, such as following up on outstanding recommendations from prior reviews in this area and reviewing San Francisco's management directive on indirect cost oversight activities. However, the review did not include an examination of the scope, methodology, and implementation of the indirect cost reviews conducted according to the January 1993 requirements because the reviews were not yet completed.

Conclusions

To its credit, DOE has established general and specific oversight requirements for contractor indirect costs in DOE Order 2200.13, two Chief Financial Officer action plans, and DOE's Field Budget Formulation Handbook. DOE's indirect cost review plan is ambitious, appropriately reflecting the need to examine the specific components of indirect costs to determine, among other things, compliance with the Cost Accounting Standards and whether the activities funded are needed and managed efficiently.

The success or failure of this indirect cost oversight initiative depends heavily upon the actions of the individual DOE operations offices. However, the performance of these offices in 1992 in determining contractor compliance with the Cost Accounting Standards raises concerns about the manner in which the current indirect cost review activities will be carried out.

This current indirect cost oversight effort involves a number of discrete reviews to be conducted by DOE's operations offices during the next few

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years. In this regard, it lends itself to evaluation early in implementation so that, if problems are found, they can be corrected immediately. In this manner, the overall success of the review program could be enhanced considerably, and the risk of having more independent reviews reveal continuing deficiencies with operations offices' oversight activities could be minimized.

It appears that DOE's periodic Controller's Compliance Reviews are taking on this important task. As such, the success of the indirect cost program also depends upon the headquarters' compliance reviews to (1) examine the indirect cost reviews being conducted by the operations offices to determine if they are adequate in scope, methodology, and implementation, and (2) ensure that any deficiencies are corrected in a timely fashion. If the compliance reviews do find deficiencies, it would be prudent for the Chief Financial Officer to issue additional review guidance to all operations offices so that the reviews to be conducted in later years benefit from the lessons learned early on.

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