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Resources, Community, and
Economic Development Division

B-280086

June 12, 1998

The Honorable Joseph M. McDade
Chairman, Subcommittee on Energy
and Water Development
Committee on Appropriations
House of Representatives

Subject: DOE Management: Functional Support Costs at DOE Facilities

Dear Mr. Chairman:

Department of Energy (DOE) managers have become increasingly concerned about the costs being incurred at DOE facilities. They are particularly concerned with costs incurred to support activities such as maintaining the nuclear weapons stockpile or conducting energy research. Such costs include those for maintaining buildings, guarding facilities and materials, and performing financial and personnel duties. DOE calls these costs functional support costs and has developed a reporting system for identifying and analyzing them. As requested, we are providing you with information on the functional support costs incurred at DOE facilities during fiscal years 1995 through 1997. We briefed your staff on this information on April 24, 1998. Specifically, this report contains information on (1) the activities included in and the relationship between overhead, indirect, and functional support costs; (2) the amount of functional support costs incurred at DOE facilities; and (3) examples of costs incurred in areas that, according to our prior work, may warrant a more detailed review. Enclosure I contains additional information on these topics, as presented at the briefing.

In summary, DOE's functional cost reporting system divides functional support costs into two major types: (1) general support, which includes activities such as executive direction (costs normally associated with the executive level of management), human resources, legal services, and procurement and (2) mission support, which includes activities more closely aligned to mission efforts, such as safeguards and security, laboratory support, utilities, and

GAO/RCED-98-193R DOE's Functional Support Costs

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maintenance. Functional costs provide a broader measure of support costs than other measures, such as overhead costs and indirect costs, because they include more expenditures. Overhead costs normally include only facilitywide costs, such as those for executive direction or legal services, that benefit operations as a whole but cannot be directly associated with specific programs. Indirect costs normally include overhead costs as well as other facility costs, such as those for division management or maintenance, that may be associated with a specific program but cannot be directly charged to a specific project or activity funded by DOE or others. Functional support costs include both overhead and indirect costs, plus direct costs that fall into the functional support categories. For example, functional support costs include utility costs that are considered indirect costs, such as those for general heating and lighting, as well as the cost of electricity used by pieces of equipment that can be directly charged to a specific activity.

The amount spent DOE-wide on functional support costs is substantial but is declining. For fiscal year 1997, contractors at 21 DOE facilities reported functional support costs of \$5.25 billion, or about 43 percent of the total costs incurred. This amount is a reduction of \$672 million, or 11 percent, from the level reported in fiscal year 1995. On a facility-specific basis, the amount spent on functional support—as a percentage of total costs—ranged from about 23 percent of total costs at the Brookhaven National Laboratory in New York to more than 75 percent of total costs at the Waste Isolation Pilot Plant in New Mexico. These variations are in part attributable to the differing missions, size, and age of each facility. However, differing methodologies for categorizing and reporting costs at the facilities may result in some inaccuracies in reporting functional support costs. DOE estimates that the reported costs are 80 to 90 percent accurate.¹ The facilities are now conducting peer reviews of each others' functional cost reporting practices in order to improve the accuracy of, and uniformity in, reporting these costs. The peer reviews, which started last year, are scheduled for completion by the end of fiscal year 1998.

Although DOE facilities have reduced functional support costs through downsizing their staffs, outsourcing tasks formerly conducted in-house, and automating certain activities, there are a number of functional cost categories that, based on issues and concerns raised in our prior work, may benefit from

¹Functional support cost data are not directly maintained by DOE facilities; consequently, they must be derived from available financial records and involve some estimates. DOE believes that the data do not need to be 100-percent accurate for their intended use in analyzing cost trends.

further detailed review.² These categories are human resources, laboratory-directed research and development, information/ outreach, and "other." They include a wide variety of costs, such as expenses for education, taxes, recreation programs, research and development, and community economic development. The appropriateness of some of these activities has been questioned in past work by us and/or others. Although DOE has established a broad performance goal of maintaining or reducing the overall percentage of total costs accounted for by functional support costs, it has not set facility-specific goals or targets for reducing functional support costs. However, one DOE organization—Environmental Management—is examining the use of such specific goals or targets to help further reduce functional support costs. Environmental Management's effort could be an extremely useful model to lay the groundwork for using such goals or targets throughout DOE. In our view, although increases in functional support costs may be warranted in certain circumstances, the use of specific targets for individual facilities, if appropriately implemented, could lead to additional cost savings.

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To prepare the information in this report, we reviewed functional support cost data for 21 DOE facilities for fiscal years 1995 through 1997. We interviewed DOE officials in the Office of the Chief Financial Officer at DOE headquarters in Washington, D.C. We also visited seven of the facilities—the Brookhaven National Laboratory in New York State, the Lawrence Livermore National Laboratory in California, the Los Alamos National Laboratory in New Mexico, the Oak Ridge National Laboratory in Tennessee, the Rocky Flats Environmental Technology Site in Colorado, the Savannah River Site in South Carolina, and the Y-12 Plant in Tennessee. At these locations, we interviewed DOE field office and contractor officials and reviewed functional support cost data and other relevant documentation. We did not attempt to verify the accuracy of the functional cost data reported by the 21 facilities; however, we

²See Department of Energy: DOE Contractor Employee Training (GAO/RCED-98-155R, May 8, 1998), DOE Contractor's Recreation Costs (GAO/RCED-94-313R, Sept. 30, 1994), Energy Management: Payments in Lieu of Taxes for DOE Property May Need to Be Reassessed (GAO/RCED-94-204, July 18, 1994), Energy Management: Types of Allowable and Unallowable Costs Incurred Under Two DOE Contracts (GAO/RCED-93-76FS, Jan. 29, 1993), Better Controls Needed Over Contractors' Discretionary R&D Funds (GAO/T-RCED-91-25, Mar. 19, 1991), and Energy Management: DOE Controls Over Contractor Expenditures Need Strengthening (GAO/RCED-87-166, Aug. 28, 1987).

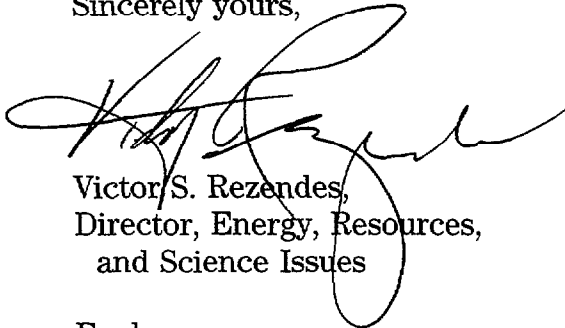
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did discuss the methodologies used to develop the data at each facility and reviewed selected costs included in various functional support categories.

We provided DOE a draft of this report and received comments from the Deputy Controller and staff from the Office of Chief Financial Officer. They agreed with the facts presented in the report. They added that the Department believes it is successfully managing support costs and that the functional support cost reporting system—through its system of uniform categorization and reporting of support costs—has resulted in these costs' receiving increased attention by management and, since 1994, declining faster than other site costs. We performed our review from December 1997 through April 1998 in accordance with generally accepted government auditing standards.

If you have any questions or need additional information, please call me at (202) 512-3841. Major contributors to this report were William F. Fenzel, Linda Chu, Robert E. Sanchez, and John R. Schulze.

Sincerely yours,

A handwritten signature in black ink, appearing to read "V. Rezendes", is written over the typed name and title.

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

Enclosure

GAO RESOURCES, COMMUNITY, AND ECONOMIC
DEVELOPMENT DIVISION

**FUNCTIONAL SUPPORT COSTS AT
DOE FACILITIES**

GAO Objectives

- What activities are included in and what is the relationship between overhead, indirect, and functional support costs?
 - What is the amount of functional support costs incurred at DOE facilities?
 - What costs/areas may warrant detailed review?
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GAO Methods for Grouping and Examining
Nonmission Costs at DOE Facilities

- Overhead Costs--Facilitywide general, administrative, and common site support costs.
 - Indirect Costs--Costs incurred that can not be directly charged to a specific program or activity.
 - Functional Support Costs--Direct and/or indirect costs that are in support of DOE's mission.
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GAO Overhead Costs

- Normally include facilitywide costs such as ones for executive direction, legal services, and financial management.
 - Costs included in overhead vary at each DOE facility (e.g., maintenance is a sitewide overhead cost at Y-12 Plant but not at Savannah River Site).
 - Consequently, comparisons of overhead costs/rates among facilities are difficult (e.g., 48% at Livermore, 28% at Y-12).
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GAO Indirect Costs

- Indirect costs normally include overhead costs as well as Department or division management, maintenance, support, and other general costs.
 - Many former indirect costs are now being charged as direct costs; consequently, total costs may not be reduced even though costs reported as overhead and/or indirect are reduced.
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GAO Functional Support Costs

- All overhead and indirect costs are captured in functional support costs.
 - Also include direct costs charged to support activities such as security, environment, safety and health, and maintenance.
 - Two types--General support (general and administrative costs) and mission support (more closely aligned to mission activities).
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GAO FY 1995-97 Functional Support Costs
(dollars in millions)

	<u>FY 1995</u>	<u>FY 1996</u>	<u>FY 1997</u>
General support	\$2,247.5	\$2,152.3	\$2,141.2
Mission support	<u>3,680.5</u>	<u>3,285.3</u>	<u>3,114.9</u>
Total	<u>\$5,928.0</u>	<u>\$5,437.6</u>	<u>\$5,256.1</u>

GAO General Support Categories and
 Fiscal Year Costs (dollars in millions)

Category (General Support)	FY 1995	FY 1996	FY 1997
Executive Direction	\$96.6	\$88.0	\$102.2
Human Resources	195.9	175.8	152.1
Chief Financial Officer	161.2	158.5	128.7
Procurement	134.5	113.5	105.1
Legal Services	36.4	36.0	37.8
Administrative Support	248.1	222.8	214.8
Program/Project Planning	88.8	101.8	120.5
Lab-Directed R&D	175.8	177.2	192.0
Information/Outreach	129.2	120.7	119.9
Fees	322.3	362.0	389.8
Taxes	93.1	102.8	71.8
Information Services	565.6	493.2	506.5
Total	\$2,247.5	\$2,152.3	\$2,141.2

GAO **Mission Support Categories and
Fiscal Year Costs (dollars in millions)**

Category (Mission Support)	FY 1995	FY 1996	FY 1997
Environment	\$228.7	\$186.0	\$171.5
Safety and Health	593.2	540.9	527.8
Facilities Mgmt./Engineering	363.0	324.9	294.2
Maintenance	854.3	795.0	739.8
Utilities	356.6	334.4	314.1
Safeguards and Security	417.1	389.7	394.9
Logistics Support	179.6	140.9	148.1
Qual. Assurance/Compliance	137.3	125.4	112.0
Laboratory Support	118.7	108.5	190.9
Other Technical Support	107.7	103.3	0.0
Matrix Management ^(a)	90.9	77.8	70.1
Other	233.4	158.5	151.5
Total	\$3,680.5	\$3,285.3	\$3,114.9

(a) Matrix management costs are the costs for management personnel whose function relates to organizations/services whose costs cannot be assigned to other functional categories.

GAO Functional Support Cost Levels Vary
Among Sites

- DOE sites report functional support costs ranging from 23% to over 75% of total site costs.
 - Differing site missions, infrastructure, and methods for categorizing costs affect level of functional support costs.
 - Facilities are now undergoing peer reviews to improve their accuracy and uniformity in reporting costs.
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GAO DOE Facilities Report Reductions in Functional Support Costs

- DOE facilities have reported an 11% reduction in functional support costs from FY 1995 to FY 1997.
 - Reductions resulted from outsourcing, downsizing, automation, etc.
 - Sold electricity generating station at Savannah River Site (\$20M annual savings).
 - Reconfigured and automated security at Oak Ridge's Y-12 Plant (over \$4M annual savings).
 - Automated many security systems at Livermore (\$5.7M annual savings).
 - Distributed directives electronically rather than printing them at Los Alamos (over \$9M savings).
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GAO Areas of Functional Costs That May Warrant Detailed Review

Based on the issues/concerns raised in our past work that relates to the functional support cost categories, costs being incurred in the the following categories may warrant a detailed review.

- Human Resources
 - Laboratory-Directed Research and Development
 - Taxes
 - Information/Outreach
 - Other
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GAO Human Resources (training, recruiting, education, other personnel concerns)

- At Los Alamos, the category includes costs for science education at local schools and in the community.
 - At Livermore, includes costs to support over 50 Univ. of Cal./Davis Applied Science graduate students (i.e., monthly wages, full tuition and equipment, for up to 5 yrs. each) who also work part-time at the lab. Also includes 50% of salaries for seven lab staff responsible for teaching and providing guidance to the students.
 - At Brookhaven, includes costs for a recreation program.
-

GAO Laboratory-Directed Research and Development (LDRD)

- Overhead cost burden is not being applied to LDRD, resulting in additional cost burden to DOE-directed activities.
 - DOE/IG report points out that Livermore is obtaining additional funding beyond DOE-provided amounts.
 - DOE permits Livermore contractor to use its performance fee to fund additional research and development (\$2.5M out of \$11.8M fee used for this in FY 1997).
 - A portion of licensing and royalty income is also used for discretionary research and development.
 - This represents an area in which costs have grown since FY 1995.
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GAO Taxes (state and municipal taxes)

- Although the federal government is exempt, a Supreme Court ruling in 1982 required DOE contractors to pay state and local taxes (sales and use taxes).
 - Sandia pays most of these taxes--about \$41 million.
 - Some facilities are exempted from taxes by section 501(c)(3) of the Internal Revenue Code (nonprofits).
 - Exceptions:
 - For some facilities, DOE pays "payments in lieu of taxes" to local communities.
 - The Supreme Court noted that DOE contractors could be tax-exempt if the Congress passed appropriate legislation.
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GAO Information/Outreach (public relations, tech. transfer, education programs)

- Some facilities fund a variety of programs in this category.
 - At Livermore, includes costs of additional science education/outreach activities (e.g., postdoctoral and summer employees' participation at conferences and seminars; tuition for 17 National Physical Sciences Consortium students for up to 6 years each; administrative staff for Univ. of Cal. Research Institutes and university outreach; summer program to recruit Univ. of Cal./Davis students).
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GAO Information/Outreach (con't)

- At Livermore, includes costs to develop and manage Industrial Partnerships (e.g., licenses, material transfer agreements, collaborations).
 - At Los Alamos, includes costs for 12 outreach programs, including ones for economic development, postdoctoral research, science education, technology transfer, and advisers to the state of New Mexico. (Does not include other economic development activities in the community, funded through DOE's Office of Worker and Community Transition.)
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GAO Other (costs not captured by another functional cost category)

- At Los Alamos, includes costs for economic development.
 - At Los Alamos, includes costs for institutional program development.
 - At Rocky Flats, includes allocations of general and administrative expenses of the corporate home office for the contractor and four prime subcontractors.
 - At Rocky Flats, includes costs of contractor-held commercial liability insurance.
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GAO Other (con't.)

- At Livermore, includes costs for program development and research, such as ones for the Center for Global Security Research (formerly the Non-Proliferation and Intelligence Center), DOD Program Office, National Security Office, and the Center for Health Care Technology.
 - At Oak Ridge National Laboratory, includes costs for Washington Liaison and research fellowships.
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