

GAO

Report to the Chairman, Subcommittee
on Investigations and Oversight,
Committee on Science, Space, and
Technology, House of Representatives

April 1993

ENERGY MANAGEMENT

DOE Has Improved Oversight of Its Work for Others Program



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

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April 7, 1993

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

Dear Mr. Chairman:

In February 1989, we identified significant weaknesses in the Department of Energy's (DOE) controls over work it carries out for others, primarily other federal agencies.¹ DOE performs this work, called Work for Others, either directly or through its management and operating contractors. In fiscal year 1992, DOE's Work for Others program cost about \$2 billion.

The Chairman of the Subcommittee requested that we determine the progress DOE has made in responding to the findings and recommendations in our 1989 report. This report discusses (1) the problems identified in the 1989 report, (2) DOE's actions in response to these problems, and (3) additional problems needing corrective action. We focused on the activities of DOE's San Francisco Field Office and its two largest facilities—the Lawrence Livermore National Laboratory and the Lawrence Berkeley Laboratory—which are operated for DOE by the University of California.²

In addition, in appendix I we provide information on the steps DOE has taken toward resolving questions raised by the Subcommittee about deviations from DOE's Work for Others procedures for projects funded by grants from the National Institutes of Health (NIH).

Results in Brief

In February 1989, we reported, among other things, that DOE needed to establish standards for reviewing and approving Work for Others projects and monitoring the contractors' performance of these projects. Because DOE did not have such standards, it could not demonstrate that the necessary reviews had been done to ensure that all Work for Others

¹Energy Management: DOE Should Improve Its Controls Over Work for Other Federal Agencies (GAO/RCED-89-21, Feb. 9, 1989).

²Our 1989 report covered three DOE field offices—Albuquerque, Oak Ridge, and San Francisco. We did not expand the scope of this follow-up effort to include the other two locations since DOE's actions to improve the Work for Others program are applicable Department-wide.

projects were consistent with DOE's mission and research standards and in accordance with applicable legislation. For example, the Economy Act allows agencies to order goods and services from other agencies as long as the work cannot be provided as conveniently or cheaply by the private sector. We also found that DOE was not charging the other federal agencies that were sponsoring Work for Others projects for its costs to administer the program.

DOE has taken action to improve its controls over the Work for Others program. Specifically, in March 1991 DOE established minimum standards for reviewing, approving, and monitoring Work for Others projects. These standards were incorporated in a July 1991 revision of DOE's Work for Others order. DOE has also begun recovering, from federal sponsors, its costs to administer the Work for Others program. In addition, in 1991 DOE instituted management reviews of its field offices to ensure consistent and effective implementation of its policies for the Work for Others program.

Our review of a random sample of 30 Work for Others projects at the Livermore and Berkeley laboratories showed that the San Francisco Field Office had not fully implemented the requirements in the July 1991 revised order. Procedures in the order specify the minimum standards for the amount and types of information DOE must obtain and review before approving projects. We found that 21 of the 30 project files lacked some of this required documentation. DOE's November 1991 management review at the San Francisco Field Office and reviews at three other field offices also found instances in which the files lacked needed documentation. The San Francisco Field Office has taken action to correct the identified deficiencies. For example, it has revised its Work for Others file checklist to make it more consistent with the revised documentation standards.

We also found cost overruns—costs incurred when authorized funding limits were exceeded—in 6 of the 30 projects we examined. Although the sponsors subsequently provided funding to cover these cost overruns, DOE could generally have been liable for these costs if the sponsors had not done so. DOE had also found cost overruns in projects it reviewed at its Oak Ridge, Tennessee, and Albuquerque, New Mexico, field offices. Provisions added to the recently signed contracts for the operation of the Livermore and Berkeley laboratories are intended to make the contractors responsible for any Work for Others cost overruns. However, not all current DOE contracts clearly include such provisions.

Background

Most of DOE's Work for Others projects are carried out for other federal agencies, but DOE also conducts projects for state and local governments, private organizations, and foreign entities. The Work for Others program allows outside organizations to take advantage of DOE's immense and often unique research capabilities. DOE benefits through better, more continuous use of its facilities and personnel—especially during periods when its own research needs decline.

Several laws authorize other agencies to participate in DOE's Work for Others program. The Economy Act of 1932 (31 U.S.C. 1535-1536) allows federal agencies to obtain goods and services from other agencies as long as the work cannot be performed as conveniently or cheaply by the private sector. Legislation specific to DOE's Work for Others program includes the Atomic Energy Act of 1954, as amended, which allows DOE to do work for other agencies only if private facilities and laboratories are not adequate, and the Energy Reorganization Act of 1974, as amended, which gives the Nuclear Regulatory Commission special access to DOE's research and development activities. DOE's policies and procedures for the Work for Others program are contained in DOE Order 4300.2B, "Non-Department of Energy Funded Work"; DOE Order 2110.1A, "Pricing of Departmental Materials and Services"; and DOE Order 2200.6, "Financial Accounting." DOE headquarters develops the program's policies and procedures, which are implemented by the field offices.

A proposal for a research project is generally initiated on the basis of contacts between employees of a federal agency with a particular research need and researchers at a DOE facility that has previous experience in that research area. These researchers are employed by the contractor that manages and operates the facility for DOE. Since only DOE can make a commitment to use a DOE facility in carrying out the research, the contractor must submit the proposed project to DOE for approval. To ensure that a Work for Others project complies with the legislative limitations mentioned above and will not interfere with DOE's other activities, DOE has established a number of criteria that must be met before a project can be accepted. Among other things,

- the proposed research must be consistent with and complementary to DOE's mission and the missions of the facility,
- the proposal must not adversely affect existing programs at the facility, and
- the project must not place DOE and the facility in direct competition with domestic private- or public-sector facilities.

DOE reviews a proposed Work for Others project in two stages. First, DOE reviews the research proposal to determine that the work is appropriate for DOE and the relevant facility and that it meets all the acceptance criteria. Second, DOE must process the sponsor's funding document³ to certify that funds are available. After the proposal is reviewed by various administrative and program officials, the DOE contracting officer for the facility must certify that the required determinations have been made. This certification must take place before the project can be formally accepted and work started—or continued, in the case of an ongoing project being funded incrementally by the sponsor.

DOE provides general oversight of the contractor's work on the project but, under DOE's policy, the sponsor is responsible for technical oversight of the project.

GAO'S February 1989 Report Identified Several Problems

In February 1989, we reported that although DOE's Work for Others policies were consistent with the requirements imposed in the authorizing legislation, DOE had not established procedures that ensured that these policies were followed in reviewing and accepting work to be done at individual facilities. Furthermore, DOE had not established standards for overseeing the contractors' work in carrying out projects that had been accepted. For example, the field offices differed in the amount of information they required the contractors to submit showing how projects met DOE's criteria. In addition, not all the field offices had complied with DOE's policy requiring the responsible contracting officers to certify that the required determinations had been made and that the projects complied with DOE's criteria.

Furthermore, DOE did not charge other federal agencies for its costs of reviewing, approving, and monitoring Work for Others projects, which was inconsistent with the Economy Act. As a result, DOE was absorbing the oversight costs of Work for Others projects.

To address these problems, we recommended that DOE establish minimum standards for (1) the amount of information that must be submitted to DOE to demonstrate that a project complies with DOE's acceptance criteria, (2) the reviews that DOE personnel must perform before a Work for Others project is approved, and (3) the monitoring that DOE personnel should

³DOE does not require a standard funding document but accepts the format submitted by the sponsoring agency if it provides the information needed. For example, DOE accepts as a funding document the Military Interdepartmental Procurement Request used by the Department of Defense.

carry out on a Work for Others project in process to ensure that the contractor is adequately performing the work.

In addition, we noted that the relevant DOE field office should ensure that its responsible contracting officer is certifying that the required determinations have been made and that the proposal meets DOE's criteria for accepting the project. We also recommended that DOE require other federal agencies to reimburse DOE for its personnel costs associated with Work for Others oversight.

DOE Initiated Changes to the Work for Others Program

DOE agreed that improvements were needed in its Work for Others program and initiated several actions in response to our report. Among other things, in March 1991 DOE established minimum standards for

- the amount and types of information DOE needs to obtain and review before deciding to approve a project, such as (1) certification from the federal agency sponsoring the research that the planned effort complies with the Economy Act of 1932 and will not place DOE in competition with the private sector, (2) the contractor's explanation of how the project meets DOE's criteria for acceptance, and (3) a statement from the contractor describing how the proposal originated;
- the reviews to be performed by DOE before the project is approved, such as a review of any planned use of subcontractors on the project and a determination that the applicable environmental, safety, and health requirements have been adequately considered; and
- DOE's monitoring of a project in process. DOE generally relies on data from a contractor's system to monitor the status of a Work for Others project. However, the actual level of monitoring for an individual project is determined by the responsible DOE organization on the basis of factors such as (1) the management and technical oversight performed by the sponsoring agency; (2) the size, sensitivity, and duration of the project; (3) the past performance of the contractor; and (4) any problems that may arise during the project.

These standards were incorporated in the July 1991 revision of DOE's Work for Others order.

In 1991, DOE headquarters also initiated management reviews of the field offices' implementation of the Work for Others program. By the end of 1992, DOE had completed reviews of the Albuquerque, Nevada, Oak Ridge, and San Francisco field offices. DOE plans to complete reviews of the

remaining four field offices during 1993. For each office's Work for Others program, the reviews assessed management, financial controls, and the amount of work being done. All four of the completed reviews reported a problem similar to the one we had found; that is, they identified instances in which the documentation was insufficient to demonstrate that projects complied with DOE's acceptance criteria. The field offices are required to develop action plans to correct problems identified in these reviews. According to DOE officials, they will make follow-up visits during 1993 and 1994 to see if appropriate corrective action has been taken.

DOE also instituted agencywide procedures to recover the full cost of DOE employees' management of federally funded Work for Others projects. At the beginning of fiscal year 1992, DOE started charging federally funded projects for departmental overhead costs. Currently, these overhead costs are calculated as 3.2 percent of the costs incurred. Therefore, when the Livermore and Berkeley laboratories bill the sponsors monthly for the costs incurred on the projects, they include an additional 3.2-percent charge for DOE's overhead costs. The laboratories remit these overhead payments to DOE.

In addition, in March 1992 DOE formally chartered the Work for Others Working Group, which had been established in 1990 as a temporary steering committee to respond to the recommendations in our 1989 report. This group is responsible for developing new policies and resolving cross-cutting issues and concerns. The group is studying, among other matters, how to (1) document that DOE facilities are not in competition with the private sector, (2) standardize the Work for Others documentation, and (3) streamline the review and approval process.

Furthermore, as part of DOE's increased emphasis on overseeing the Work for Others program and to better monitor projects, the San Francisco Field Office increased its staff located at the laboratories. The DOE personnel at these two laboratories stated that they are still becoming familiar with their new role and are developing oversight procedures.

Procedural Weakness Continued in the San Francisco Field Office

Our examination of 30 proposals disclosed that the San Francisco Field Office had not fully implemented the revised procedures contained in the July 1991 DOE Work for Others order. These procedures specify the minimum standards for the amount and type of information DOE needs to approve a project. We randomly selected the proposals from the 115 federally funded Work for Others proposals at the Livermore and Berkeley

laboratories that the Office had approved after DOE issued the revised order. We found that 21 of the 30 files examined lacked at least one required statement:

- Files for 19 (10 at the Livermore laboratory and 9 at the Berkeley laboratory) of the 30 projects did not contain the required statement from the contractor describing how the Work for Others proposal originated.
- Files for two other projects (both at the Livermore laboratory) did not contain the required statement from the funding agency on compliance with the Economy Act.
- These 21 files included five project files (four at the Livermore laboratory and one at the Berkeley laboratory) that lacked both of these statements.

DOE had identified similar problems in its November 1991 management review of the San Francisco Field Office. For example, as in the other three reviews of field offices it completed, DOE found project files in which the documentation was not adequate to support its approval of the proposal and acceptance of the sponsor's funding document. For example, in some files the required contracting officer's certifications were not complete, or the sponsor's statement that the use of the DOE facilities complied with the Economy Act was missing.

In March 1992, to correct the deficiencies identified in the management review, the San Francisco Field Office revised its Work for Others file checklist to make it more consistent with the revised procedures. The office also added a separate certification form to be signed by the contracting officer once the determinations needed for project approval have been made. However, the checklist does not list the required statement explaining how the project originated—the main problem identified in our sample. Furthermore, of the six proposals we reviewed that were approved after the new checklist was developed, the files for four did not contain a clear explanation of how the project originated. According to San Francisco Field Office officials, Livermore laboratory officials had already brought the omission of the statement on project origination from the checklist to their attention, and they have verbally reminded their contractors to submit these statements.

In its management review of the San Francisco Field Office, DOE also reported that the contractors had incurred cost overruns on Work for Others projects. Similar problems were reported at DOE's Albuquerque and Oak Ridge field offices. In the random sample of 30 projects we reviewed, we also found projects with cost overruns. According to DOE Order 2200.6,

work on a project cannot be started until DOE accepts the funds provided by the sponsor for that fiscal year, and work cannot be continued beyond the period or amount of funding provided. For 6 (3 each at the Livermore and Berkeley laboratories) of the 30 projects, the laboratories incurred costs of about \$210,000 (\$180,000 at Livermore and \$30,000 at Berkeley) in excess of available funding. These overruns all occurred on ongoing research projects during a gap between the time the authorized funding had all been used and the time DOE received and accepted the funding for the next segment of research. In each case, funding subsequently provided by the sponsors covered the amount of the cost overrun.

Contractor officials at the Livermore laboratory said that stopping and then restarting work on a continuing project results in inefficiencies and a loss of research momentum. They therefore believe that if the laboratory has already received the sponsor's funding document, the cost of work done before DOE's review and acceptance of the funding document should not be considered a cost overrun.

This position conflicts with the policy that DOE cannot authorize the work until it reviews and accepts the funding document from the sponsor to ensure that funds are available. In addition, for the six projects with cost overruns we found, only one project's sponsor had issued the funding document before the cost overruns began. On that project, the Berkeley laboratory incurred a cost overrun of about \$1,000 in December 1991 while DOE was processing the sponsor's funding document, dated November 21, 1991. For the remaining five projects with cost overruns, the cost overruns began before the sponsors authorized additional funding.

Under DOE's former contracts for the management and operation of the Livermore and Berkeley laboratories, DOE could have been liable for cost overruns if the sponsor had not funded the continuation proposal. However, new contracts between DOE and the University of California for management of the Livermore and Berkeley laboratories, signed on November 20, 1992, provide that

In the event that a work for others project is intended to be continuous, but funding authorizations are not provided on a timely basis to the Laboratory, DOE authorizes the University to continue work at the University's expense with the University's money, when assured by the sponsor as to the continuation of funding, for a period not to exceed 90 days, and to retroactively charge costs to the work for others sponsor for any periods during which the University provided financing for the work and for which the sponsor has provided funding.

According to the San Francisco Field Office's chief negotiator for the new contracts, this provision is intended to ensure that DOE is not liable for cost overruns incurred before it accepts the sponsoring agency's funding document. However, because not all DOE contracts contain similar provisions, DOE could still be financially liable for cost overruns at other locations if the expected funding is not received.

Conclusions

DOE has revised its procedures to address the problems identified in our 1989 report. However, our analysis of a random sample of projects at the San Francisco Field Office and DOE's reviews at four field offices indicated that these procedures have not been fully implemented. In March 1992, in response to DOE's Work for Others management review, the San Francisco Field Office initiated action to ensure that it obtains the required documentation and certifications. However, it omitted one required statement from its revised checklist. Continued attention is needed to ensure that the changes are effectively implemented so that DOE obtains the documentation and conducts the reviews needed to adequately support its decision to accept Work for Others projects.

Furthermore, DOE could be at fiscal risk if work is continued after funding has been exhausted. Minimizing cost overruns on Work for Others projects or shifting the potential financial responsibility for the costs incurred to the contractor could help avoid this risk. At both the Livermore and Berkeley laboratories, projects incurred cost overruns for which DOE might have been responsible if the sponsors had not subsequently provided funding. DOE intends the provisions of its new contract with the University of California for the operation of the Livermore and Berkeley laboratories to relieve the Department of financial liability in this area. DOE's reviews at other field offices have also identified cost overruns on Work for Others projects. However, since provisions similar to those in the new contract with the University of California have not been included in all contracts, DOE may be responsible for such cost overruns if the sponsor does not provide the anticipated funding.

Recommendation

We recommend that the Secretary of Energy revise DOE's other management and operating contracts as they are renewed or awarded to clearly make the contractors liable for any costs incurred before DOE formally authorizes work to begin, either for new projects or for ongoing projects for which additional funding is to be provided by the sponsor.

Agency Comments

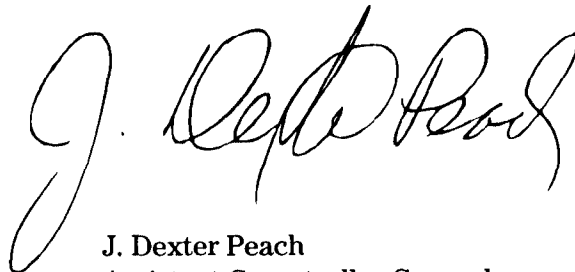
As requested, we did not obtain written comments on a draft of this report. We discussed the factual information in the draft report with DOE, NIH, and Livermore and Berkeley laboratory officials. These officials included the Director of DOE's Management Systems Division, the Director of the San Francisco Field Office's Financial Accounting and Systems Branch, a Grants Policy Officer in NIH's Office of Extramural Research, the Finance Manager for the Livermore laboratory, and the Head of the Technology Transfer Department at the Berkeley laboratory. With minor clarifications, they generally agreed with the facts presented.

We reviewed DOE's policies and procedures on the Work for Others program with particular attention to changes made since our February 1989 report. To determine DOE's progress in responding to the findings and recommendations in our 1989 report and to determine if any additional actions are needed, we randomly selected 30 federally funded Work for Others proposals for detailed examination. Details of our efforts and selection criteria are presented in appendix II. We conducted our review from April 1992 to February 1993 in accordance with generally accepted government auditing standards.

As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days after the date of this letter. At that time, we will send copies to Secretary of Energy. 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 may be reached at (202) 512-3841 if you or your staff have any questions. Other major contributors to this report are listed in appendix III.

Sincerely yours,



J. Dexter Peach
Assistant Comptroller General

Contents

Letter	1
Appendix I Improvements in San Francisco Field Office's Controls Over Projects Funded by NIH Grants	14
Appendix II Scope and Methodology	15
Appendix III Major Contributors to This Report	16

Abbreviations

DOE	Department of Energy
GAO	General Accounting Office
NIH	National Institutes of Health

Improvements in San Francisco Field Office's Controls Over Projects Funded by NIH Grants

In a hearing on July 31, 1991, the Subcommittee expressed concern about Work for Others projects at the Berkeley laboratory funded by National Institutes of Health (NIH) grants awarded to the University of California, operator of the Berkeley laboratory.¹ The Subcommittee questioned the laboratory's practice of submitting grant proposals to NIH and the fact that the Department of Energy's (DOE) financial system was not accounting for the resulting grants. In view of these problems, the Subcommittee questioned the adequacy of DOE's controls over the NIH work.

DOE's San Francisco Field Office responded to these concerns by instituting new procedures for administering NIH grants early in fiscal year 1992. For example, San Francisco staff members now review and approve NIH grant proposals before the laboratories submit them to NIH. This approach is similar to the process used for other federally funded Work for Others projects. In addition, when the laboratories receive the grant-funding documents, which are issued to the University of California as operator of the laboratories, they now notify DOE of this funding. DOE then records the NIH grants in its financial records in the same way it records funds received from other federal agencies.

In addition to instituting the new procedures, DOE signed a memorandum of understanding with NIH, effective March 1, 1993, that addresses two additional concerns: what overhead costs should be paid from grant funds and whether NIH grants should be issued to DOE, like other federally funded Work for Others projects, or to the University of California. Among other things, the memorandum of understanding defines the relationship between the two agencies for NIH-grant-supported research projects at the DOE laboratories. It also provides that (1) each grant application to NIH must include a cover letter indicating DOE's review and approval of the application; (2) the grants may be awarded to the DOE laboratory contractor as the entity most immediately responsible for the scientific and administrative conduct of the project; (3) DOE will waive its overhead rate for NIH grants in recognition of the substantial benefits DOE's programs derive from research supported by NIH grants;² and (4) while NIH is unable to award funds specifically for laboratory-directed research and development at the DOE laboratories, NIH will not restrict the DOE laboratory contractor from recovering such costs within the total funding for the NIH grant.

¹Other DOE facilities also receive NIH grants. The Berkeley laboratory, however, received the largest share of NIH grants made to DOE facilities in fiscal year 1991.

²The Atomic Energy Act, as amended, authorizes the Secretary of Energy to allow DOE facilities to be used for such research and to determine whether and how much to charge for that use.

Scope and Methodology

In response to a request from the Chairman, Subcommittee on Investigations and Oversight, House Committee on Science, Space, and Technology, we reviewed DOE's policies and procedures for the Work for Others program with particular attention to changes made since our February 1989 report.¹ We interviewed officials and reviewed documents obtained from DOE's headquarters, DOE's San Francisco Field Office, and two facilities operated for DOE by the University of California—the Lawrence Livermore National Laboratory and the Lawrence Berkeley Laboratory. We also obtained information from officials of the National Institutes of Health on their policies and procedures for awarding grants for research to be carried out at DOE facilities.

To determine DOE's progress in responding to the findings and recommendations in our 1989 report and to determine if any additional actions are needed, we examined a random sample of projects from the universe of 67 federally funded Work for Others proposals at the Livermore laboratory and 48 at the Berkeley laboratory. The San Francisco Field Office had approved these proposals after DOE's revised Work for Others order was issued on July 16, 1991, and had accepted the sponsors' funding before the start of our detailed examination on June 22, 1992. As agreed, we excluded intelligence and special-access programs from our universe. The estimated value of the proposals in our universe was about \$389 million, \$359 million at the Livermore laboratory and \$30 million at the Berkeley laboratory. From this universe, we randomly selected 20 proposals at the Livermore laboratory and 10 proposals at the Berkeley laboratory for detailed examination. The proposals in our sample had an estimated value of about \$102 million (\$101 million for projects at the Livermore laboratory and \$1 million for projects at the Berkeley laboratory). The 30 projects included 17 proposals for new research and 13 proposals for ongoing research. Because some sponsors supply funding in increments over the course of projects, 42 funding actions were associated with the 30 proposals in our sample. Using DOE's criteria, we examined the proposals to ensure that DOE's procedures for approving proposals and accepting the sponsors' funding documents were followed. Because we found that most of the problems identified in the previous report had been corrected, we did not expand the size of our sample. The size of our sample, however, was not large enough to make statistically valid projections to the universe.

¹GAO/RCED-89-21.

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