

GAO

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

June 1993

FEDERAL RESEARCH

Minor Changes Would Further Improve New NSF Indirect Cost Guidance





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

Resources, Community, and
Economic Development Division

B-252792

June 3, 1993

The Honorable Rick Boucher
Chairman, Subcommittee on Science
Committee on Science, Space,
and Technology
House of Representatives

Dear Mr. Chairman:

The National Science Foundation (NSF), an independent federal agency with a fiscal year 1993 budget of about \$2.7 billion, promotes and advances science in the United States, primarily through grants to research institutions. The grants generally pay for both the direct and indirect costs of federally funded research. Direct costs are those that can be identified with a particular project, such as the salaries of the investigators or the equipment and materials needed for that project. Indirect costs—overhead—are those costs that cannot readily be assigned to individual projects, such as utility and accounting expenses.

Recently, it has become widely known that inappropriate indirect costs were charged to the government by several large universities receiving federal grant money. For example, in August 1992,¹ we reported that inadequate federal guidance and oversight and weak internal controls contributed to federal reimbursement at four universities for such unallowable costs as entertainment, depreciation of a 72-foot yacht, and operating costs of a shopping center. While the majority of NSF's funds (about 90 percent) goes to the major research institutions, the remaining 10 percent goes to smaller institutions, including several hundred small commercial and nonprofit firms, museums, and associations.

Concerned that indirect cost abuses could also be occurring at the smaller organizations and small businesses for which NSF has oversight responsibility,² you requested that we provide information on, and identify improvements needed in, (1) the indirect cost guidance that NSF provides to these recipients, (2) NSF's procedures for establishing indirect cost

¹Federal Research: System for Reimbursing Universities' Indirect Costs Should Be Reevaluated (GAO/RCED-92-203, Aug. 26, 1992).

²Larger recipients are assigned to a cognizant agency by the Office of Management and Budget, while smaller recipients generally come under the oversight of the agency that provides the most federal funds to them. The cognizant and oversight agencies play similar roles, such as ensuring that the recipient is audited and establishing the indirect cost rates that the recipient can charge to each research project. NSF has not been designated as a cognizant agency for any of the recipients, but it does have oversight responsibility for about 500 smaller research institutions.

rates, and (3) the extent to which NSF's audit guidelines and audits cover indirect cost charges.

Results in Brief

NSF has recently issued two new guidance publications on indirect costs to its grant recipients. First, a September 1991 booklet describes, among other things, indirect cost terms and methods used to compute the indirect cost rate—the way institutions charge their indirect costs. Second, NSF's April 1992 information packet describes the financial data the recipient should submit to support its proposed indirect cost rate and gives examples of unallowable costs. However, the packet does not cite the applicable federal circulars and regulations that contain complete listings of such costs or state where such information can be obtained.

NSF's procedures for reviewing indirect cost rate proposals appear to be adequate. These procedures include examining management and accounting system information for adequate controls and reviewing proposals for compliance with federal regulations by identifying and excluding categories of unallowable costs. We reviewed a sample of 25 indirect cost files and confirmed that NSF had correctly identified and excluded all the appropriate categories of unallowable costs from the recipients' indirect rate proposals.

NSF's audit guidelines include steps for examining indirect cost charges. The steps, which appear to be adequate, include examining a sample of these transactions to ensure that the costs are allowable under federal regulations and determining that the recipient used the approved rate to calculate the indirect costs to be charged to NSF or other federal agencies. We reviewed a sample of 25 audit reports and found that the audits appeared to follow applicable guidelines. Twenty audit reports had either questioned some of the indirect cost charges or otherwise shown that indirect costs had been examined. In the remaining five reports, reviews of indirect costs were not mentioned. However, an NSF official pointed out that auditors are not required to mention indirect costs if no problems are found and that therefore it is possible that some or all of the remaining reports also examined indirect costs.

Background

The federal government awards grants, contracts, and cooperative agreements to universities and other institutions to fund scientific

NSF Issues New Guidance, but Refinements Would Be Helpful

In the last 2 years, NSF has issued new indirect cost guidance to its recipients. This guidance supplements its Grant Policy Manual and its Grant General Conditions. Both of these documents provide overall grant guidance and requirements, with only limited information on indirect costs. The new guidance includes a booklet entitled Federally Sponsored Research: How Indirect Costs Are Charged by Educational and Other Research Institutions. Issued by NSF's Inspector General in September 1991, this booklet was prepared in response to the concerns about the indirect costs inappropriately charged by some of the larger educational institutions. Generally, the booklet describes some of the indirect cost problems identified. It also provides definitions of the terms involved and examples of the calculations commonly used to determine indirect cost rates.

In addition, in April 1992, a packet of information was issued by NSF's Cost Analysis Section on how to develop a proposal for indirect cost rates. The Cost Analysis Section has been sending this packet to prospective recipients. The packet provides a sample indirect cost proposal with explanations on how it was prepared. The sample notes that certain costs that may be allowed as deductions for income tax purposes are not allowable as indirect costs to be charged to federal grants. For example, the sample cites bad debts, entertainment, contributions, and interest, and shows that these types of costs must be eliminated to determine the total indirect costs used in calculating the sample's indirect cost rate. The packet also explains that the recipient must have a cost accounting system that records and accumulates costs by project and a system, such as time sheets, to support charges for salaries and wages—common problems identified in audits of recipients.

Although issuance of the new guidance is a positive step, additional refinements would be helpful. For example, NSF provides examples of unallowable costs in the proposal packet but does not cite the applicable OMB circulars and federal regulation that contain the rules for charging indirect costs. Furthermore, neither the Office of Inspector General booklet nor the information packet indicates where copies of the circulars or regulation can be obtained. As a result, the recipient must consult two or more documents to identify the applicable circular or regulation and to determine where to obtain copies. Consolidating this information in the proposal packet would make it more useful to the grantees.

research and educational activities.³ Governmentwide cost principles and procedures have been published for use in determining reimbursable costs. The following Office of Management and Budget (OMB) circulars apply to nonprofit institutions. OMB Circular A-21 generally applies to institutions of higher education; Circular A-87 applies to state and local governments and Indian tribal governments; and Circular A-122 applies to other nonprofit organizations. The Federal Acquisition Regulation, Subpart 31.2, applies to commercial organizations. Both the circulars and the regulation specify that certain costs, such as entertainment, fines and penalties, and interest, are unallowable charges to federally funded projects.

Institutions generally are reimbursed for their indirect costs at a negotiated rate. This rate varies from institution to institution and is usually based on the ratio of direct to indirect costs. For example, a 2:1 ratio of direct to indirect costs would result in a 50-percent indirect cost rate; that is, for every \$1 charged directly to the project, 50 cents could be charged for indirect costs.

NSF and other agencies establish these rates on the basis of financial information that institutions submit to substantiate their proposals for indirect cost rates. Because the grantees for which NSF sets the rate usually have only one or two major functions, indirect costs can be allocated just by separating total costs into direct and indirect costs. Universities, on the other hand, normally accumulate indirect costs in seven indirect cost pools,⁴ which are allocated among the major functions of the university, such as instruction and sponsored research. The total costs allocated to sponsored research are used to determine the indirect cost rate for the university.

Because of the various cost pools used, it may be difficult to determine which costs are actually included in a university's indirect cost rates until there is an audit. For the grantees for whom NSF sets the rates, however, it is usually possible to identify major unallowable or inappropriate costs by reviewing a schedule of the costs included in the direct and indirect cost categories.

³Grants and cooperative agreements provide support or assistance to the recipient, while contracts acquire goods or services for the agency. Grants require the least agency involvement and contracts the most.

⁴The indirect cost pools are depreciation and use allowances, operating and maintenance expenses, general administration and general expenses, departmental administration expenses, sponsored projects administration expenses, and library expenses.

NSF's Procedures for Reviewing Rate Proposals Appear Adequate

NSF's procedures for reviewing indirect cost rate proposals appear to be adequate. Generally, NSF requires prospective recipients to submit an indirect cost rate proposal with financial data supporting the rate they are requesting. The Cost Analysis Section, established within the Division of Grants and Contracts in April 1989 to determine the indirect cost rate for recipients, reviews the prospective recipient's information. It examines information about the recipient's management and accounting systems to assess, among other things, the adequacy of the organization's controls over expenditures. The Cost Analysis Section also reviews the information to ensure that only cost categories that are allowable under federal regulations were used in determining the requested rate and that the rate was calculated adequately. For example, the section checks to see that the recipient did not include such unallowable categories as entertainment and fund-raising in its proposal.

To determine whether NSF had implemented its procedures for screening out unallowable costs from indirect cost rate proposals, we reviewed 25 randomly selected indirect cost files. Our review of the recipients' financial information showed that NSF had appropriately questioned and excluded certain cost categories. For example, in one file NSF appropriately questioned and excluded charitable donations—an unallowable indirect cost category. Furthermore, we did not identify any cost categories that should have been excluded from the rate calculation but were not. Similarly, our review of the files for the four largest NSF recipients did not identify any types of costs designated as unallowable under federal regulations.⁵

NSF's Audits Include Reviews of Indirect Costs

NSF's audit guidelines for both contractor- and NSF-conducted audits include steps for examining the recipient's actual indirect cost transactions as well as the calculation of the indirect costs charged to NSF. And, like the procedures for reviewing indirect cost proposals, the audit guidelines appear adequate.

Although NSF's Office of Inspector General conducts some audits, NSF primarily relies on certified public accounting contractors to audit the recipient's cost charges.⁶ NSF's audit guidelines include such steps as a selective examination of transactions to determine whether the indirect costs charged are allowable under federal regulations, a check of the

⁵Three of these recipients received funds through cooperative agreements and one through a contract.

⁶Contractors conducted 70 percent (42 of 60) of NSF's fiscal year 1992 audits.

mathematical computation of the indirect costs charged to NSF, and verification that the actual rate used was the NSF-approved rate.

NSF also receives reports on OMB Circular A-133 audits (or similar types of audits) for some of its recipients. This audit is an organizationwide audit of a nonprofit recipient conducted by an independent auditor, and its purpose is to determine, among other things, whether the recipient's financial statements fairly present the results of the recipient's operations, in accordance with generally accepted accounting principles. The audit is also used to determine whether the recipient's internal controls provide reasonable assurance that the recipient is managing its federal grants and contracts in compliance with applicable laws and regulations.

Of the 25 audit reports we reviewed, 8 covered Circular A-133-type audits and 17 covered NSF audits. Of the 17 NSF audits, 4 were conducted by NSF's Office of Inspector General and 13 by contractors. We reviewed the scope of work and the findings identified in the 25 randomly selected audit reports. The audits generally appeared to follow the guidelines. Our sample—selected from a universe of 110 reports issued between October 1, 1990, and March 31, 1992—confirmed that in most cases indirect costs had been examined and questioned by the auditors. In 20 of the 25 audit reports, the auditors had either questioned indirect cost charges or mentioned that these had been audited. In 15 reports, the auditors specifically questioned some of the indirect costs charged to NSF, and in 5 reports, the auditors indicated in the scope of work that indirect costs had been examined.

The remaining five reports did not mention that indirect costs had been audited. However, according to an NSF official, auditors are not required to mention indirect costs if no problems are found. Therefore, it is possible that some or all of the remaining reports also examined indirect costs.

Conclusions

To prevent unallowable or inappropriate costs from being charged to the government, it is important that adequate controls and proper oversight be in place to detect such costs. The first step in ensuring adequate controls is the guidance that establishes the cost principles and criteria that recipients should follow in distinguishing between allowable and unallowable costs.

To improve its guidance to educational and other research institutions, NSF issued two new indirect cost guides. These guides, combined with the

applicable federal circulars and regulations, provide comprehensive indirect cost guidance that research institutions can use in developing their rate proposals. However, the proposal packet, which goes to all institutions submitting a proposal for an indirect cost rate, could be more helpful. Although the packet contains a partial list of unallowable indirect costs, it does not cite the applicable circulars or regulations that provide complete information; nor does it indicate where copies of these circulars and regulations can be obtained. Providing such additional information in the proposal packet would better ensure that recipients understand the indirect costs that may be charged to the government. We believe that every measure should be taken to ensure that the government pays only those costs for which it is responsible, particularly in light of the problems identified at some of the large research institutions.

The second step in ensuring that unallowable or inappropriate costs are not charged to the government is proper oversight of the proposed and claimed costs. Both NSF's procedures for reviewing indirect cost rate proposals and audit guidelines, which include steps for examining indirect cost charges, appear to be adequate. While our review of samples of indirect cost files and audit reports showed that NSF has generally implemented procedures and audit steps to identify unallowable indirect costs, it is important that NSF continue to oversee the recipients and learn from its reviews and audit findings whether future refinements to its indirect cost guidance may be needed.

Recommendation

To improve the indirect cost guidance provided to NSF recipients, we recommend that the Director, NSF, revise the proposal packet to cite the applicable OMB circulars and the federal regulation that provide comprehensive listings of allowable and unallowable indirect costs and indicate where to obtain these circulars and the regulation.

Agency Comments

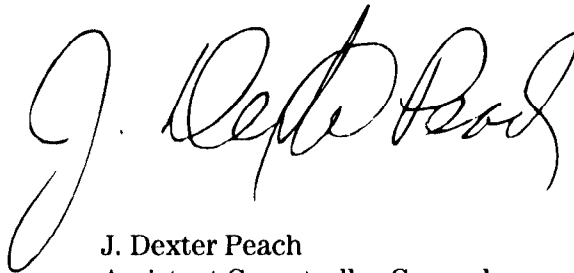
NSF concurred with our recommendation and stated that it is revising its indirect cost guidance for organizations that are new to NSF. The revised guidelines will include additional detail and clarification on unallowable costs as well as sources from which the appropriate OMB circulars or Federal Acquisition Regulation can be obtained. NSF's comments are contained in appendix II.

For our three objectives, we interviewed appropriate NSF officials in Washington, D.C., and selected recipients in the Boston, Massachusetts, area; Green Bank, West Virginia; and Charlottesville, Virginia. We also reviewed pertinent guidance and regulations and took random samples of files. Our samples were not large enough to make statistical estimates about the respective universes. We conducted our review from May 1992 to April 1993 in accordance with generally accepted government auditing standards. Additional information on our scope and methodology is contained in appendix I.

As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 15 days after the date of this letter. At that time, we will send copies of this report to the Director, NSF. We will also make copies available to others on request.

This work was conducted 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. Other major contributors to this report are listed in appendix III.

Sincerely yours,

A handwritten signature in black ink, appearing to read "J. Dexter Peach". The signature is written in a cursive style with a large, looping initial "J".

J. Dexter Peach
Assistant Comptroller General

Scope and Methodology

We were asked by the Chairman, Subcommittee on Science, House Committee on Science, Space, and Technology, to provide information on, and identify improvements needed in, (1) the indirect cost guidance that the National Science Foundation (NSF) provides to grant recipients, (2) NSF's procedures for establishing indirect cost rates, and (3) the extent to which NSF's audit guidelines and audits cover indirect cost charges.

To review NSF's indirect cost guidance, we identified and examined NSF's overall grant guidance and the Foundation's most recent indirect cost guidance. We also discussed the guidance with NSF officials. Furthermore, we reviewed OMB circulars and the Federal Acquisition Regulation for federal indirect cost requirements for different types of organizations.

We tested the procedures and guidelines by reviewing a random sample of NSF's indirect cost proposal files. From the 915 indirect cost rate files held by the Cost Analysis Section in July 1992, we randomly selected and examined the most recent rate in 25 files for recipients for which NSF had established an indirect cost rate after July 1990. We reviewed these files between August 1992 and April 1993. Of the 25 files reviewed, the earliest rate was set in August 1990 and the latest in November 1992. We reviewed the supporting documentation for the indirect cost categories proposed by these recipients, compared the categories with those that are allowed under the appropriate federal regulations, and examined NSF's reviews of the proposals, specifically the cost categories questioned and excluded by NSF. Our sample was not large enough to make statistical estimates about the universe. Because we did not identify any significant deficiencies in NSF's reviews of these indirect cost proposals, we did not select any additional files for review.

We also reviewed the rate proposals for three cooperative agreements and one contract—NSF's four largest recipients between January 1, 1987, and December 31, 1992. NSF uses cooperative agreements with organizations operating NSF-owned facilities, such as the astronomy observatory in Green Bank, West Virginia. Therefore, because NSF pays all allowable costs incurred to operate the facility, the indirect cost rate NSF establishes for these facilities is used to determine the cost that will be charged to other agencies using these facilities. We also judgmentally selected and visited two grant recipients in the Boston, Massachusetts, area and two of the field locations of a cooperative agreement recipient in Green Bank, West Virginia, and Charlottesville, Virginia. At these locations, we reviewed files and interviewed officials.

In our review of NSF audits, we examined NSF's audit guidelines for coverage of indirect costs by both NSF's Office of Inspector General staff and contractor accounting firms. We also reviewed 25 randomly selected audit reports—4 conducted by NSF's Office of Inspector General, 13 conducted by accounting firms under contract to NSF, and 8 conducted by accounting firms in compliance with OMB Circular A-133 or similar circulars. We selected the audit reports from a universe of 110 such reports issued between October 1, 1990, and March 31, 1992. We reviewed the scope of work as well as the identified findings in these reports for any mention of indirect costs. We also checked the audit resolution documents to determine if the auditors' findings were valid. Our sample was not large enough to make statistical estimates about the universe. Again, because we did not find any significant deficiencies in the coverage of the audits, we did not expand the scope of our review.

Comments From the National Science Foundation

NATIONAL SCIENCE FOUNDATION
1800 G STREET, N.W.
WASHINGTON, D.C. 20550



OFFICE OF THE
DIRECTOR

May 11, 1993

Mr. Victor S. Rezendes
Director, Energy and Science Issues
Resources, Community, and
Economic Development Division
United States General Accounting Office
Washington, D.C. 20548

Dear Mr. Rezendes:

The National Science Foundation (NSF) appreciates the opportunity to provide comments on your recently proposed report entitled, Federal Research: Minor Changes Would Further Improve New NSF Indirect Cost Guidance.

We agree with the recommendation that additional guidance from NSF would improve the information available to NSF award recipients relative to Federal cost principles and the accounting requirements under Federal awards. The current guidance provided to organizations new to NSF is in the process of revision and will include additional detail and clarification on unallowable costs, as well as sources the prospective organization can access to obtain the appropriate OMB Circulars and/or Federal Acquisition Regulations. The revised guidance is expected to be completed within the next 30 days.

NSF is pleased with the positive findings resulting from this review and will provide further comments and input as necessary.

Sincerely,

A handwritten signature in cursive script, appearing to read 'Frederick M. Bernthal'.

Frederick M. Bernthal
Acting Director

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