

Audits & Reviews

Significant Contracts and Other Award Audits

During this semiannual period seven reports were issued, one of which contained a total of \$88 million in questioned proposed costs. We also continued our efforts to ensure that the \$3 billion that NSF received under the American Recovery and Reinvestment Act (ARRA) was managed effectively and in accordance with the Act's requirements and goals.

Deficiencies Remain in Administration of Cost Reimbursement Contracts and Other Awards

We continue to monitor NSF's process to address the significant deficiency in monitoring cost reimbursement contracts reported in NSF's FY 2009 Financial Statement audit. We also reviewed a \$400 million cooperative agreement that included over \$100 million in ARRA funds.

In our last semiannual report⁹, we identified significant deficiencies in NSF's administration of contract and awards with a non-profit organization, Consortium for Ocean Leadership (COL). COL is a non-profit organization that manages ocean research and education programs. Following is a summary of four audits related to COL which were issued during this reporting period.

Non-Profit's Budget Included \$88 Million of Unallowable Contingency Costs

The audit of COL's \$386 million budget to construct the Ocean Observatories Initiative project questioned \$88.1 million allocated for contingency costs.¹⁰ This figure represents 22.7 percent of COL's proposed budget. Further, over \$34 million of these contingency costs were ARRA funds.

The audit disclosed that COL incorrectly classified contingency costs in the proposed budgets as equipment costs. COL officials stated to the auditors that the contingency costs would only be used if the awardee overran the budget due to unforeseeable factors. It is important to note that the audit concluded that COL can draw down the contingency funds as advanced payments in the same manner as other funds in its budget in advance of the contingencies occurring. The audit did not find any controls or technical barriers

⁹ March 2010 Semiannual Report, p. 10.

¹⁰ Costs questioned in a proposed budget are classified as Funds Put to Better Use.

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to prevent COL from drawing down contingency funds and spending them without NSF approval. It was recommended that NSF require COL to remove unallowable contingency provisions from its proposed budgets and to discontinue its practice of funding contingencies in this fashion.

The second audit found that COL's accounting system was adequate; however, NSF had not provided COL with a determination as to whether the organization's CAS Disclosure Statements were adequate and in compliance with federal requirements. An approved CAS Disclosure Statement is essential because it is the basis for COL classifying and billing costs to NSF. Further, the audit disclosed that NSF approved, and COL used, a non-compliant method to allocate indirect costs to all COL's contracts and awards. As a result, indirect costs were incorrectly charged to NSF awards. We recommended that NSF require COL to change its accounting practice to a compliant method. The OIG and NSF will work to address these matters during the audit resolution process.

Audit of Contract with Non-Profit Identifies Over \$500,000 in Questioned Costs

Cost reimbursement contracts are considered to be high-risk because of the potential for cost escalation. Cost reimbursement costs that are paid in advance are considered a higher risk because contractors are paid prior to providing the required goods and services. Since COL has a cost reimbursement contract with NSF that has advance payment provisions, an incurred cost audit was conducted of costs claimed by the Joint Oceanographic Institution, which was merged with another entity to form COL in May 2007.

The audit questioned costs for unsupported consultant fees and for other unallowable costs. Specifically, the auditors questioned over \$324,000 in consultant fees because of inadequate supporting documentation. The auditors also questioned more than \$19,000 in costs for beverages and snacks. In addition, more than \$32,000 in reorganization costs and \$15,000 in unreasonable rent costs, were questioned. For the four months subsequent to the merger, the audit questioned costs of more than \$195,000, including \$80,000 for consultant fees that lacked adequate support and over \$112,000 costs including unallowable reorganization, travel, beverages and snacks.

COL disagreed with the questioned costs, asserting that it had adequate documentation for the consultant costs and citing the importance of beverages and snacks to employee morale. We recommended that NSF resolve the questioned costs identified in the audit.

Adequate Property Controls at Non-Profit's Subawardee

The fourth COL audit was a review at Texas A&M Research Foundation, a subawardee under COL's contract with NSF. The audit found that property controls over COL's government-owned equipment, valued at over \$38 million, were adequate for accounting and tracking equipment purchased with federal funds.

Non-Profit's Monitoring of Subrecipients Needs Improvement

Incorporated Research Institutions for Seismology (IRIS) is a non-profit organization comprised of a consortium of over 100 educational and seismology research member institutions. NSF awarded two cooperative agreements valued at a total of \$80 million to IRIS.

An audit of the accounting system for IRIS disclosed four material weaknesses. First, subrecipient monitoring was inadequate because IRIS did not ensure that subrecipients were completing OMB required audits within nine months of year end or adequately monitoring the subrecipients during the award period. This is significant because over one-third of the revenue that IRIS earned in 2008 and 2009, was attributed to costs charged to NSF by IRIS subrecipients.

Second, IRIS did not maintain files to document the basis for subrecipient selection, to justify the lack of competition when competitive bids were not obtained, or to document cost and price analyses and the basis for the award costs.

Third, the auditors identified several labor accounting issues, including a method of allocating employees' leave time that could result in inaccurate payroll costs being charged to NSF and the approval of timesheets that did not support the actual hours worked. It is essential for the labor accounting system to be sound for NSF to have assurance that labor charges it pays are for work that benefited the NSF program.

Finally, the IRIS accounting manual does not provide a procedure for accumulating and billing indirect costs. IRIS generally agreed with the audit's recommendations.

Associated Universities, Inc. Agrees to Document Planning Process

Associated Universities, Inc. is the management organization for the NSF's National Radio Astronomy Observatory and other astronomical observatories, including the Atacama Large Millimeter Array, which is under construction. An audit was conducted to determine whether AUI's short- and long-term planning and budget preparation processes, used to prepare AUI's \$458 million budget for the next five years, were adequate to ensure proper stewardship of NSF funds. The audit found that the processes to prepare for the budget and performance plan were adequate. However, the auditors recommended that AUI prepare a single document that consolidates and describes all of its planning process. AUI agreed to provide an outline of its planning process by March 2011.

Deficiencies in Contract Monitoring

We issued an alert memo relating to NSF's contract with Integrated Ocean Drilling Program Management International, Inc (IODP-MI). The contract is valued at over \$337 million and provides management and planning for NSF's ocean drilling program.

Monitoring deficiencies identified include the lack of timely and adequate incurred cost submissions by the contractor and the lack of an NSF determination that IODP-MI's accounting system is adequate for billing costs to the government. As a result, NSF risks paying unallowable costs on this contract.

OIG Continues To Monitor Antarctic Support Contract Competition

NSF is in the process of selecting a contractor to manage the United States Antarctic Program (USAP) for the next 13.5 years. The current contract is NSF's largest and is currently valued at approximately \$1.6 billion over eleven years.

The OIG continues to recommend that NSF ensure that Defense Contracting Audit Agency (DCAA) audits are obtained of business and financial systems along with cost proposals submitted by bidders. These audits should be conducted for all the bidders selected for inclusion in the competitive range in order to reduce the risk of excessive costs being billed to the government. Such audits would determine whether business and financial systems are capable of ensuring that government funds are properly allocated and billed and that costs proposed are reasonable and allowable charges. It is important that NSF obtain these audits in a timely manner so additional delays do not occur in the award of the new contract. Continuing delays in making a new contract award have resulted in NSF negotiating with the incumbent for a second extension of the Antarctic Support Contract.

Monitoring ARRA Funds

Efforts to Oversee ARRA Compliance Continue

NSF received \$3 billion in ARRA funds. During this period we reviewed NSF's oversight of one of these ARRA-funded projects. We also reviewed the completeness and accuracy of 10 awardees' quarterly ARRA reports.

OIG Survey Provides Information about NSF's Oversight Plan for Construction of Alaska Region Research Vessel

NSF awarded \$148 million in Recovery Act funds to the University of Alaska Fairbanks for construction of the Alaska Region Research Vessel, Sikuliaq, which will replace the oldest ship in the national Academic Research Fleet. The Sikuliaq will operate year-round in the ice-choked waters around Alaska and the polar region; contain extensive research instrumentation, scientific equipment, and laboratories; and will be available to scientists and students in a variety of disciplines through the University-National Oceanographic Laboratory System scheduling process.

Our survey of NSF's oversight plan for the vessel's construction indicated that at this point, NSF appears to have an adequate oversight structure for overseeing the Sikuliaq construction project. Specifically, NSF has assigned staff with extensive experience in ship construction to this project and has put

ongoing monitoring practices in place. Additionally, the agency is reviewing the University of Alaska Fairbank's business systems supporting administrative management of the Sikuliaq construction.

Construction of the Sikuliaq is slated to begin in October 2010, and we plan to continue to monitor construction progress to enable us to review critical issues as they arise and provide timely feedback and recommendations to NSF.

Quarterly Reports from ARRA Recipients Were Generally Accurate and Complete

Recipients of Recovery Act funds are required to submit quarterly reports that include data related to the projects funded and the impact of these projects on job creation. Our review covered several specific data elements required in quarterly reports including: number of jobs, amount of ARRA funds received, ARRA expenditures, and project status. We examined this data as reported by five institutions that received ARRA funds: the California Institute of Technology, the California State University Fresno Foundation, George Mason University, University of Colorado – Boulder, and University of Kentucky. We concluded that these institutions had generally established appropriate processes for compiling and reporting quarterly data in compliance with ARRA reporting requirements.

However, we identified five areas where these NSF recipients were not consistently, accurately, or completely reporting data in their quarterly reports. These areas were: ARRA jobs for NSF fellowship, scholarship, and training grants; job estimates for sub-awards and vendor contracts, jobs reported in the proper quarter, grant activities, and sub-awardee and contractor debarment and suspension status. If the Recovery Act's goals of accountability and transparency are to be met, it is critical for this information to be accurate. It is important to note, however, that we believe that awardees will address the reporting issues we identified as they refine their ARRA reporting procedures.

To improve reporting accuracy, we recommended that NSF perform additional outreach to its recipient community and/or work with the Office of Management and Budget (OMB) to enhance its reporting guidance to promote consistent and accurate recipient reporting. Key recommendations included that NSF provide clarification on whether ARRA job creation and retention estimates should be reported for NSF fellowships, scholarships, and training grants and for vendor contracts under \$25,000. We also recommended that NSF conduct more outreach to emphasize the importance of reporting job information in the quarter in which the work was performed. Further, we recommended that recipients take steps to ensure that they do not award ARRA funds to entities that have been debarred or suspended from receiving Federal money.

NSF generally agreed with the findings and recommendations and has taken or proposed appropriate actions to address the recommendations. In general, each recipient agreed to implement the suggested corrective actions to establish and/or enhance processes to improve the quality and accuracy of its quarterly ARRA data.

We also reviewed five additional ARRA recipients, in conjunction with four other Offices of Inspector General, as part of Recovery Accountability and Transparency Board project. This review covered the same five data elements as our separate review, and there were 29 ARRA recipients examined by the Inspectors General involved in this project. These reviews also noted difficulties with jobs reporting, concluding that only seven of 29 recipients reported their jobs data consistent with federal guidance.

During this reporting period, as part of an effort coordinated by the Recovery Board, we, along with five other OIGs, contributed to an audit of agencies' internal controls over ARRA recipient reporting. The OIGs found that generally, agencies had complied with OMB guidance for oversight of recipient reporting. Our report on NSF's effectiveness in overseeing recipient reporting will be issued in the next semiannual period.

Audit Resolution

NSF Agrees to Take Steps to Address Challenges of Rotating Executive Workforce

NSF's rotating executive workforce presents challenges to effective personnel management because assignees under the Intergovernmental Personnel Act (IPAs) are not included in the performance management system and because IPAs generally do not have prior experience with federal management processes. In response to our audit assessing NSF's rotating executive workforce, the agency has agreed to implement a performance management process for IPAs next year. NSF is also continuing to develop and expand its orientation and management development programs for IPAs.

National Science Board Is Improving Compliance with Sunshine Act

The National Science Board has agreed to complete all actions recommended in our 2010 audit to improve compliance with the Government in Sunshine Act by the end of this year. The Board has hired legal counsel to help ensure compliance with the Act and has drafted checklists to help staff comply with numerous Sunshine Act requirements. Further, the Board is upgrading the recording technology it uses to ensure complete recordings of each closed meeting.

Civilian Research Development Foundation (CRDF) Strengthens Controls over Sub-recipients Funds

To address our audit recommendations, CRDF agreed to implement stronger internal controls and procedures to oversee sub-recipients, including an improved time keeping system, required mandatory audits, and a more objective cost allocation methodology. Further, CRDF agreed to provide training and to develop additional guidance on allowable expenses to prevent their employees from charging unallowable costs to NSF awards.

Washington University in St. Louis Enhances Implementation and Oversight of Labor Effort Reporting System

In response to our February 2010 audit, Washington University has taken several steps to enhance implementation and oversight of its new labor effort reporting system, including requiring mandatory effort reporting training for all faculty and conducting periodic evaluations of its effort reporting processes.

NSF will continue to work with the University to require additional actions including expanding mandatory effort reporting training to all staff charging labor cost to federal awards and documenting that comprehensive evaluations of the effort reporting system have been implemented.

NSF Sustains Nearly \$700,000 in Questioned Fringe Benefit Costs

In response to audit recommendations, NSF sustained nearly \$700,000 in questioned fringe benefit costs claimed by Raytheon Polar Services Company.

More Effective Audit Resolution Process

In response to our December 2009 audit of the process for resolving audit recommendations directed at NSF grantees and following up to ensure that corrective actions are implemented, the Inspector General and NSF's Acting Deputy Director formed a working group to consider new strategies to improve this process. A robust audit resolution process is critical to ensure that institutions receiving funds from NSF take the necessary corrective action to properly manage those funds.

Through a collaborative process, the OIG and NSF developed a new audit resolution process to create more effective stewardship over federal funds awarded by NSF. The new process was put into place in September, and the OIG and NSF senior management who developed the process have formed a Stewardship Collaborative. The purpose of this group is to monitor and refine the audit resolution process and to provide a forum to discuss emerging issues. The anticipated outcome is achieving the shared mission of proper stewardship of the taxpayers' investment in science, engineering, and education.

A-133 Audits

Single Audits Identify 225 Findings and \$1.4 Million in Questioned Costs At 70 NSF Awardees

OMB Circular A-133 provides audit requirements for state and local governments, colleges and universities, and non-profit organizations receiving federal awards. Under this Circular, covered entities that expend \$500,000 or more a year in federal awards must obtain an annual organization-wide audit that includes the entity's financial statements and compliance with federal award requirements. Non-federal auditors, such as public accounting firms and state

auditors, conduct these single audits. The OIG reviews the resulting audit reports for findings and questioned costs related to NSF awards, and to ensure that the reports comply with the requirements of OMB Circular A-133.

For the 143 audit reports reviewed and referred to NSF's Cost Analysis and Audit Resolution (CAAR) Branch this period,¹¹ covering NSF expenditures of \$10.8 billion¹² during audit years 2006 through 2009, the auditors identified 225 findings at 70 NSF awardees. Three awardees received qualified opinions on their financial statements and 14 awardees received qualified opinions on their compliance with federal grant requirements, including 3 awardees who received qualified opinions on compliance for programs which included NSF ARRA expenditures. The auditors identified material weaknesses and/or significant deficiencies in 50 reports (71 percent of reports with findings), indicating substantial concerns about the awardees' ability to manage NSF funds. 28 findings identified by the auditors resulted in \$1.4 million in questioned costs to NSF awards, of which \$1.1 million were caused by lack of adequate supporting documentation of the amounts charged to NSF awards. Awardees' lack of internal controls and noncompliance with federal requirements included: untimely and/or incorrect reporting of time and effort; inadequate support for salary/wages, equipment, travel, and indirect costs charged to awards; inadequate monitoring of subrecipients; inability to prepare the financial statements; and late submission of financial and/or progress reports.

We also examined 74 management letters accompanying the A-133 audit reports and found 12 deficiencies that affected NSF. Auditors issue these letters to identify internal control deficiencies that are not significant enough to include in the audit report, but which could become more serious over time if not addressed. The deficiencies included inadequate tracking, managing, and accounting for NSF costs, and ineffective segregation of duties. These deficiencies affected control processes that are essential to ensuring stewardship of NSF funds and preventing fraud and abuse.

We provided the results of each audit report to NSF and, where appropriate, highlighted our concerns related to opinions or findings. In certain instances, such as reports which contained significant deficiencies or material weaknesses repeated for three or more consecutive years and/or reports which identified \$100,000 or more in questioned costs to NSF awards, we requested that NSF coordinate with us during the audit resolution process. NSF coordinated with us as requested prior to completing resolution of 3 reports.

Audit Timeliness and Quality Deficiencies Continue to Plague Single Audits

The audit findings in A-133 reports are useful to NSF in planning site visits and other post-award monitoring. Because of the importance of A-133 reports to this oversight process, the OIG reviews all reports for which NSF is the cognizant or oversight agency for audit, and provides guidance to awardees and auditors

¹¹ We reviewed 2 reports but rejected them due to audit quality issues. One report was revised and resubmitted during the period, and is included in this summary. Once we receive the second revised report, we will review it, and if acceptable, refer it to NSF for resolution.

¹² Amount includes \$4.5 million in NSF ARRA expenditures.

for the improvement of audit quality in future reports. In addition, OIG returns reports that are deemed inadequate to the awardees to work with the audit firms to take corrective action.

We reviewed 61 audit reports¹³ for which NSF was the cognizant or oversight agency for audit, and found that 29 fully met federal reporting requirements.

Thirty-one reports reviewed had timeliness and quality issues. Audit quality issues identified included 17 reports in which the Schedule of Expenditures of Federal Awards did not provide sufficient information to allow for identification of awards received from non-federal “pass-through” entities or did not adequately describe the significant accounting policies used to prepare the schedule, including 2 reports which failed to accurately identify ARRA expenditures. Of the 13 reports which included audit findings, 9 reports failed to adequately present the required elements of the finding to assist auditee management in correcting the reported deficiency. Six reports were submitted after the submission deadline. In addition, there were 10 reviews that contained quality issues which had been previously identified for the same awardees and auditors.

We contacted the auditors and awardees, as appropriate, for explanations of each of the potential errors. In most cases, the auditors and awardees either provided adequate explanations and/or additional information to demonstrate compliance with federal reporting requirements, or the error did not materially affect the results of the audit. However, we rejected two reports due to substantial non-compliance with federal reporting requirements. We issued a letter to each auditor and awardee informing them of the results of our review and the specific issues on which to work during future audits to improve the quality and reliability of the report.

Efforts in Response to National Single Audit Sampling Project, Recovery Act, and Improper Payments Improvement Act

We previously reported ongoing efforts to improve the quality and oversight of single audits in response to the recommendations of the National Single Audit Sampling Project and on our participation in OMB workgroups.¹⁴

The Council of Inspectors General on Integrity and Efficiency (CIGIE) approved revisions to the standards for conducting quality control reviews and desk reviews. Our participation in the OMB workgroup established in response to Executive Order 13520, “Reducing Improper Payments,” led to several recommendations which would, if implemented, enhance and streamline the Single Audit process to better support the overall effort to improve federal program accountability and reduce improper payments.

¹³ The audits were conducted by 41 independent public accounting firms.

¹⁴ Previously reported in September 2007 Semiannual Report, p. 17, and September 2009 Semiannual Report, p.18.

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