

NATIONAL SCIENCE FOUNDATION
4201 WILSON BOULEVARD
ARLINGTON, VIRGINIA 22230

November 30, 2015



OFFICE OF THE
DIRECTOR

Dr. Dan Arvizu
Chairman, National Science Board
6397 West Prentice Avenue
Littleton, CO 80123

Dr. Arvizu,

The National Science Foundation herewith transmits its response to the Inspector General's Semiannual Report, which covers the period April 1 through September 30 of 2015. Also included for the same time period is the management report on final actions on audits with disallowed costs.

NSF and the Office of the Inspector General (OIG) have fundamental differences in interpretation and application of a few key Agency policies, on which many of the OIG's audit findings, questioned costs, and recommendations ultimately depend. In the Agency's response we seek to clarify these differences and expand on the rationale for actions we have taken. We hope that NSF's response to the OIG Semiannual Report will present a fair view of the numerous ways in which the agency has responded to OIG concerns and continuously improved upon its processes.

Sincerely,

A handwritten signature in blue ink that reads "Richard O. Buckius". The signature is written in a cursive, flowing style.

Richard O. Buckius
Chief Operating Officer

Enclosures

cc: France Córdova
Lawrence Rudolph

Agency Response to the Office of the Inspector General's Semiannual Report to Congress

NSF appreciates the opportunity to provide its response to the Office of Inspector General's (OIG) Semiannual Report, covering the period from April 1, 2015 through September 30, 2015. We provide additional information and context to certain audits and an investigation by the OIG so as to provide an accurate presentation of NSF's responses thereto. We also include the Management Report on final actions on audits with disallowed costs during this reporting period.

At the outset, we are pleased to report that, for FY2015, NSF received its eighteenth consecutive unmodified audit opinion, noting no material weaknesses and one significant deficiency. The OIG, particularly the OIG's Office of Audit, is important to NSF's efforts to maintain this clean audit opinion, by identifying questioned costs arising from external awards as well as opportunities to improve internal controls. To that end, Director Córdova re-emphasized in a memorandum to all staff, dated October 30, 2015 (NSF O/D 15-26), that the OIG ensures the Foundation's integrity by preventing and detecting fraud, waste, mismanagement, and abuse of our programs and operations, and that the OIG's mission necessarily requires information and assistance from NSF managers and staff.

NSF and the OIG have engaged in unique ways to advance the agency's and the OIG's missions. For example, in 2010, the NSF's Office of Budget, Finance and Award Administration (BFA) and the OIG established the Stewardship Collaborative, to monitor and improve the audit resolution process, and address emerging and outstanding issues. The Collaborative provides a forum for discussing issues affecting the NSF and the OIG relationship, including policy interpretation, audit quality, and trends in audit findings.

While we acknowledge the importance of the OIG's work, as highlighted in its Semiannual Report, we note that, in at least certain instances, the report does not fully and fairly reflect NSF's responsiveness to the OIG or the nature of the disagreements between NSF and the OIG.

Additional Information for Key OIG Audits

NSF and the OIG have fundamental differences in interpretation and application of a limited set of Agency policies, to which many of the OIG's audit findings, questioned costs, and recommendations depend. In some instances, the OIG's interpretation of a policy runs counter to the views of other agencies. For three such instances, NSF provides additional context and clarification:

1. NSF's Management of NEON

NSF shares the OIG's concerns with the National Ecological Observatory Network (NEON) project. At the outset, we clarify that, while the OIG repeatedly refers to the "potential cost overrun," NSF has in place a "no cost overrun" policy for large facilities projects. As such, we

emphasize again that appropriate measures have been taken under this policy and there has not been any cost overrun on the NEON project.

More broadly, the OIG fails to identify the core issue with this transformative project: NEON Inc.'s difficulties in managing the project to the approved plan and budget, including managing risks, identifying and correcting problems, and continuously updating the cost to complete. To address this broader, overarching concern, NSF, in testimony before Congress this September, stated that it is actively evaluating NEON, Inc.'s ability to manage the project going forward as well as potential options. In this manner, NSF is addressing the root cause for the cost estimate deficiencies.

Correspondingly, NSF has strengthened its oversight and controls of NEON and its other large facilities projects. However, many of these efforts are not recognized by the OIG, as follows:

(a) Cost Estimates

NSF acknowledges the challenges of receiving sound and well-documented cost estimates from NEON, Inc. However, we disagree with the OIG's statement that NSF was unable to determine a fair and reasonable price under federal cost principles prior to the award. Indeed, NSF ultimately sustained \$19M in questioned costs from the award based on a detailed analysis and subsequent delivery of adequate documentation.

Still, NSF agrees with the OIG on the importance of obtaining an updated cost estimate for NEON. As a result, NSF has provided substantial agency guidance on the requirements for the latest estimate being developed and will contract for its own Independent Cost Estimate for the remaining work in order to support the decision on any future award.

NSF fully acknowledges the need to strengthen its cost estimation expectations and subsequent cost analysis techniques for all large facility projects. Unfortunately, the OIG omits any reference to related new policies and procedures, codified in a recent revision of the NSF *Large Facilities Manual*, which require an NSF cost analysis at each stage-gate review during design. And internal policy now requires the use of Independent Cost Estimate Reviews per the *GAO Cost Estimating Guide*. Additional NSF requirements for cost proposal submissions and estimating requirements are in the process of being implemented through the Large Facilities Manual.

(b) Incurred Cost Audits

NSF agrees with the OIG that incurred cost audits are a valuable tool for identifying unallowable costs and has already implemented a risk-based approach to trigger when such audits would be conducted to enhance oversight. Correspondingly, NSF has identified NEON as a high-risk project and will therefore conduct its own incurred cost audit on NEON in FY16.

However, an incurred cost audit can only evaluate past costs, not future projections of costs. As such, the OIG misapplies the tool of incurred cost audits to the problem of identifying or projecting potential cost overruns.

(c) “De-Scoping” of NEON

NSF shares the concerns of Congress and the OIG about the potential impact of the de-scoping of NEON. We note, however, that an independent report from a scientific advisory committee recently affirmed the capabilities of the NEON project as modified by NSF under its no-cost overrun policy. Going forward, NSF will rely on this vital report in decisions related to any potential changes in NEON’s scope.

In sum, NSF has taken proactive and constructive steps to address problems with the NEON project.

2. Contingency Funds for Construction Projects

The OIG’s recommendation for tracking contingency funds within accounting systems reflects a fundamental misunderstanding of contingency and deviates from the requirements for all other federal agencies. Most notably, the OIG’s use of the terms “contingency expenditures” or “contingency costs” is a reflection of that misunderstanding. Contingency properly refers to funds that are an allocation of budget to the work being performed to cover a realized project risk. Once this allocation of budget occurs, the expected cost increases and the contingency portion is no longer separable from the rest of the work planned. In other words, it is not possible to distinguish work funded by contingency from the rest of the work through the accounting system since the revised costs will only be seen as total “incurred costs.” Hence, neither NSF nor any other federal agency requires the tracking of contingency in its own or its awardee’s accounting system.

Most importantly, NSF’s requirements for the awardees’ management of contingency are in full compliance with OMB’s Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards (“Uniform Guidance”) and good practice. NSF affirms that the proper tools for oversight of contingency are the rigorous change request process (i.e. “verifiable from the non-Federal entities records,” per the Uniform Guidance), the project controls system that supports Earned Value Management and evaluating the allowable use funds through the incurred cost audit. And NSF has strengthened all of these mechanisms over the past two years.

That said, NSF agrees with the OIG that better documentation on the allocations of contingency budget and the potential holding back of some portion of contingency could strengthen NSF’s oversight without fundamentally altering compliance with the Uniform Guidance. NSF is in the process of modifying and standardizing the terms and conditions with its awardees and its internal procedures to implement these changes.

3. Senior Personnel Salaries and Wage Policy

NSF and the OIG fundamentally disagree about the underlying policy applied by the OIG to yield findings and questioned costs related to “excess salary.” Since 1976, NSF has viewed the two-month “Senior Personnel Salaries and Wages Policy” as a proposal budgeting policy, while the OIG views it as a strict cap on post-award compensation. Under the OIG’s interpretation, awardees cannot re-budget under any circumstance salaries in excess of two months, absent prior approval from NSF.

NSF believes that the OIG’s interpretation runs counter to OMB Circular A-110, “Uniform Administrative Requirements for Grants and Agreements With Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations.” Under Circular A-110, there has never been a prior approval requirement to exceed two months, as long as that change would not cause the objectives or scope of the project to change. NSF’s inclusion of such a requirement in its award terms and conditions would have necessitated OMB approval to deviate from the Circular Requirements.

NSF disagrees with the OIG’s statement that “[c]onflicting guidance has hampered the ability of institutions to properly implement the [two]-month rule.” In NSF’s Proposal & Award Policies and Procedures Guide (NSF 15-1), NSF clarified the salaries and wages policy through the addition of the following statement:

Under normal rebudgeting authority . . . an awardee can internally approve an increase or decrease in person months devoted to the project after an award is made, even if doing so results in salary support for senior personnel exceeding the two-month salary policy. No prior approval from NSF is necessary as long as that change would not cause the objectives or scope of the project to change. NSF prior approval is necessary if the objectives or scope of the project change.

It is important to note that this was not a change in policy, but rather a clarification of our long-standing policy.

In view of the OIG’s disagreement with NSF about this policy, the OIG “escalated” or challenged NSF’s resolution of questioned salary costs for the OIG’s audit of Virginia Polytechnic Institute and State University (Virginia Tech). Pursuant to OMB Circular A-50, “Audit Followup,” the Audit Followup Official (AFO) carefully reviewed the OIG’s position and determined that NSF’s resolution of this issue was appropriate.

More specifically, the Virginia Tech AFO decision affirmed that, by the nature of assistance awards, awardees have the responsibility to determine how best to achieve stated goals within project objective or scope. Research often requires adjustments, and NSF permits post-award re-budgeting of faculty compensation. The AFO decision further stated that NSF is aligned with

federal guidelines and regulations in allowing re-budgeting of such compensation without prior Agency approval, unless it results in changes to objectives or scope.

Notwithstanding the Virginia Tech AFO decision, the OIG subsequently escalated similar resolutions of questioned salary costs for audits of the University of Florida (UF) and Michigan State University (MSU). Again, the AFO found that the OIG offered no evidence to support a finding that there were changes in scope or objective that required prior NSF approval, such that the AFO affirmed the Virginia Tech decision and allowed the questioned salary costs for UF and MSU.

Additional Information related to an OIG Investigation

The OIG's report includes an investigative summary entitled, "NSF Declines to Debar Professors Who Failed to Disclose Dual Employment at U.S. and Foreign Universities." The OIG reports that, while NSF issued a notice of proposed five-year debarment to the professors, "[u]ltimately, NSF took no administrative action." This description does not provide a fair and balanced description of the totality of NSF's review of the investigation and its engagement with the OIG.

More specifically, NSF proposed a debarment based on OIG's recommendation and the evidence the OIG provided as a result of their investigation. NSF worked closely with the OIG to sustain that debarment, sharing all of the opposition evidence and arguments in the proceeding and consulting closely with the OIG regarding the relevance and veracity of that evidence. Only after a thorough review did NSF conclude that we could not responsibly proceed further with a debarment action, based on the burden of proof required in debarment actions. The OIG's statement that NSF took no action belies NSF's close work with the OIG on this matter and considerable efforts to adjudicate a fair outcome.

The Management Report on Final Actions of Audits

The "Management Report on Final Actions Taken on Audits with Disallowed Costs" (also known as Final Action Tables) are appended to this report. The Final Action Tables are developed parallel to the OIG Semiannual Reports and provide information on all resolved audit reports requiring recovery of disallowed costs (collections, offsets, write-offs, demands for payment and other monetary benefits resulting from audits). These tables are submitted to the Agency Head semi-annually, as required by OMB Circular No. A-50, Revised, Section 8.a.(8), who provides them to the OIG to be submitted to Congress in conjunction with the OIG's Semiannual Report to Congress.

Conclusion

We reiterate our appreciation for the OIG's role in advancing NSF's effective stewardship of taxpayer dollars. We recognize that the NSF and the OIG disagree on the OIG's interpretation of a narrow set of policies or the outcome of an investigation. These disagreements do not

represent NSF's lack of oversight and management of its awards and programs, nor do they diminish the OIG's importance to the agency. NSF remains committed to working with the OIG toward our shared goal of stewardship.

Management Report on Final Action for the Period Ending September 30, 2015			Sustained Costs
A. Audit Reports with management decision on which final action has not been taken at the beginning of the period:			
1	06-1023	Raytheon Company ¹	10,362,698.00
2	08-1009	School District of Philadelphia ²	2,512,246.00
3	15-5-105	Little Priest Tribal College	51,112.00
Subtotal A			
			3
			12,926,056.00
B. Audit Reports on which management decisions were made during the period:			
1	12-5-143	Fort Berthold Community College	5,975.00
2	13-1-001	University of Wisconsin	0.00
3	13-5-094	Fort Berthold Community College	3,375.00
4	14-1-002	Virginia Polytechnic Institute & State University	64,138.00
5	14-1-004	University of California - Los Angeles	130,469.00
6	14-1-006	University of Illinois at Urbana-Champaign	101,995.00
7	14-4-109	Marine Biological Laboratory	0.00
8	14-5-018	Fort Berthold Community College	195.00
9	14-5-119	Fisk University	3,750.00
10	15-1-003	Michigan State University	0.00
11	15-1-004	University of Florida	124,341.00
Subtotal B			
			11
			434,238.00
C. Total Audit Reports pending final action during this period (Total A+B: 14)			13,360,294.00
D. Audit Reports on which final action was taken during this period:			
1	12-5-143	Fort Berthold Community College	5,975.00
2	13-1-001	University of Wisconsin	0.00
3	13-5-094	Fort Berthold Community College	3,375.00
4	14-1-002	Virginia Polytechnic Institute & State University	64,138.00
5	14-1-004	University of California - Los Angeles	130,469.00
6	14-1-006	University of Illinois at Urbana-Champaign	101,995.00
7	14-4-109	Marine Biological Laboratory	0.00
8	14-5-018	Fort Berthold Community College	195.00
9	14-5-119	Fisk University	3,750.00
10	15-1-003	Michigan State University	0.00
11	15-1-004	University of Florida	124,341.00
Subtotal D			
			11
			434,238.00
E. Audit Reports needing final action at the end of the period			
1	06-1023	Raytheon Company ¹	10,362,698.00
2	08-1009	School District of Philadelphia ²	2,512,246.00
3	15-5-105	Little Priest Tribal College	51,112.00
Subtotal E			
			3
			12,926,056.00
F. Reconciliation of Audit Reports (Total D+E: 14)			13,360,294.00
¹ Final action (collection) for Raytheon 05-1-005 will occur during closeout of the contract. ² Awardee has agreed to a payment plan of \$70,000/month from April 2013 through April 2016. Balance due as of September 30, 2015 is estimated at \$692,246.			

**Management Report on Final Action
on Audits with Disallowed Costs for the Six-month Period
Ended September 30, 2015**

	Number of Reports	Dollar Value
A. Audit reports with management decision on which final action has not been taken at the beginning of the period	3	\$12,926,056
B. Audit reports on which management decisions were made during the period	11	\$434,238
C. Total audit reports pending final action during this period (Total A+B)	14	\$13,360,294
D. Audit reports on which final action was taken during this period		
(1) Recoveries		
a) Collection and Offset	11	\$434,238
b) Amount uncollectible	0	
(2) Write-offs	0	
E. Audit reports needing final action at the end of the reporting period (C-D)	3	\$12,926,056
F. Total (D+E)	14	\$13,360,294

**Management Report on Final Action
on Audits with Recommendations for Better Use of Funds
Agreed to by Management
For the Six-month Period Ended September 30, 2015**

	Number of Reports	Dollar Value
A. Audit Reports with management decisions on which final action had not been taken at the beginning of the period	0	\$0
B. Audit Reports on which management decisions were made during the period	0	\$0
C. Audit reports on which final action was taken during this period (Total A+B)	0	\$0
D. Recommendations on which final action was taken during this period	0	
(1) the dollar value of recommendations that were actually completed		\$0
(2) the dollar value of recommendations that management subsequently concluded should not or could not be implemented or completed		\$0
E. Audit reports for which no final action has been taken by the end of the reporting period (C-D)	0	\$0