



# **Audit of Effort Reporting System**

**University of Wisconsin-Madison  
Madison, Wisconsin**

**National Science Foundation  
Office of Inspector General**

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## Executive Summary

This audit report provides the results of our review of the effort certification system used by University of Wisconsin-Madison (Wisconsin) to validate salaries and wages charged to National Science Foundation (NSF) grants. In fiscal year (FY) 2007, Wisconsin's Federally-sponsored projects totaled approximately \$71.9 million, of which \$125 million or 17% were funded by NSF. Of the \$125 million, more than \$31 million were for labor costs directly charged to NSF awards. This audit is one in a series of Office of Inspector General (OIG) reviews of the labor effort distribution systems being conducted at NSF's top-funded universities. The review's main purpose is to determine whether the internal controls over salary and wage costs claimed on NSF grants were properly managed, accounted for, and monitored.

Our review disclosed that Wisconsin generally had a well established and sound grants management program. However, the audit disclosed internal control weaknesses that Wisconsin needs to correct to ensure proper implementation and oversight of its effort reporting system. We identified system weaknesses in: oversight of the effort reporting process; calculations for NSF summer salary limitations; and the effort reporting training program. Specifically, reviews in 2006, prior to implementation of a new effort reporting system, identified a number of non-compliance issues with federal and NSF requirements that should have been identified and corrected through the oversight process. While the new system implemented by Wisconsin corrected many of the weaknesses identified in the 2006 reviews, our audit of FY 2007 effort reporting identified the additional weaknesses listed above. Further, Wisconsin had not conducted an independent internal evaluation of the prior effort reporting system since at least the early 1990's that also could have identified and corrected these deficiencies.

In addition, Wisconsin did not fully comply with NSF's salary limitations for faculty research. This resulted in two of four principal investigators (PIs) exceeding the limitation and overcharging NSF \$2,941 in salary and benefits. Although the overcharges are not significant unto themselves, based on our testing, over \$753,000 of the \$31 million in FY 2007 faculty labor charges was at risk for overcharges. Finally, the audit disclosed that Wisconsin, prior to 2007, had not established an effective training program for university personnel involved in the effort reporting process. In fact, the first university wide required effort report training was for the implementation of the new effort reporting system in 2007.

As a result, Wisconsin provides less assurance to NSF and Federal sponsoring agencies that effort reports are reliable in reasonably supporting the \$31 million in NSF salary and wages charged to sponsored projects, as well as the salary portion of the \$594 million of other Federal agency funding.

These weaknesses occurred because Wisconsin, prior to FY 2006, did not place sufficient emphasis on effort reporting. Specifically, Wisconsin had not established sufficient detailed written guidance for all effort reporting processes to ensure full compliance with Federal requirements for oversight and compliance with federal and NSF policies. Further, prior to the implementation of the new system and significant revamping of their policies and procedures,

Wisconsin had not developed adequate policies to provide adequate training to university personnel on requirements and responsibilities for effort reporting.

Our recommendations were primarily directed at developing and implementing clear written policies for periodic oversight of the effort reporting process, compliance with NSF's salary limitations, and a training program. Finally, we recommended that Wisconsin resolve the \$2,941 in questioned salary, wages and fringe benefits.

A draft audit report requesting comments on the findings and recommendations was issued to the University of Wisconsin Madison. The University generally agreed with the facts and findings and concurred with the recommendations. The University, in recognition of the weaknesses identified in the report, will address future, regular evaluations of its effort reporting processes and practices, enhance its policies and procedures, repay the questioned costs and provide additional opportunities for refresher training.

Wisconsin's responses, once fully implemented, should address our audit recommendations. NSF should work with the cognizant audit agency and/or Wisconsin to ensure the University develops an acceptable corrective action plan to resolve each audit recommendation. We have summarized Wisconsin's responses and provided our comments after each recommendation in the report. The University's complete response to the draft report is included as Appendix B.

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<b>ACRONYMS</b>		
NSF	National Science Foundation	
PI	Principal Investigator	
OIG	Office of Inspector General	
OMB	U.S. Office of Management and Budget	
PAR	Personal Activity Report	
RSP	Office of Research and Sponsored Programs	
ECRT	Effort Certification & Reporting Technology	

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## INTRODUCTION

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### BACKGROUND

Approximately one third of the National Science Foundation (NSF) award funds are provided for salaries and wages, amounting to about \$1.3 billion annually at universities. Also, in recent years, there have been several civil settlements involving overcharges of labor costs to Federal grants amounting to millions of dollars at several major universities, including some funded by NSF. Because of these legal actions and material amounts of labor costs paid from NSF awards, the Office of Inspector General (OIG) is undertaking a series of reviews of the labor effort distribution systems at NSF's top-funded universities in order to assess the adequacy of the internal controls to ensure salary and wage costs claimed on NSF grants are properly managed, accounted for, and monitored. This audit, involving the University of Wisconsin-Madison (Wisconsin) is one of the planned reviews of such labor effort distribution systems.

Wisconsin's fundamental missions are teaching, research and public service. Teaching and educating students occur at all levels, from undergraduate to the most advanced graduate level. Wisconsin is built upon fundamental values regarding its relationship with the state and dedication to its educational mission. Founded as a land-grant institution in 1848, it is the flagship of the University of Wisconsin System, an educational system of 26 two- and four-year Colleges and Universities located throughout the State of Wisconsin. It is the largest institution in the State and one of the largest single campuses in the nation with a total enrollment of over 41,000 students and a faculty of over 2,200.

Wisconsin is a major teaching and research university. It is one of the top five universities in the country in terms of research expenditures, and in 2007 reached over \$1 billion in new awards. In 2006, it was ranked 8<sup>th</sup> in the world in terms of the volume of scientific publications by the *Academic Ranking of World Universities*. The fiscal year 2006/2007 budget was \$2.19 billion excluding the university's hospitals and clinics. The significant budget components are federal programs and projects \$655.3M; gifts, grants and segregated funds of \$409.8M; and student tuition revenue of \$327.4.

The University's management and oversight of Federal grant programs is shared between its Office of Research and Sponsored Programs (RSP) and the Dean's offices of the various schools and colleges and the Principal Investigators. Primarily, RSP is tasked with providing institutional oversight of both pre-award and post-award activities and ensuring Wisconsin's compliance with Federal grant regulations and sponsoring agency requirements. As such, RSP recommends Wisconsin policies and procedures for Federal grants management and is charged with implementing appropriate training programs. RSP is also responsible for compiling and distributing the effort reports to all academic departments to provide for the certification of actual work effort devoted to Federally-sponsored projects. The Dean's offices of the various schools and colleges and the Principal Investigators have shared responsibility with RSP and departmental

administrators for financial administration and monitoring of the active Federal award projects.

Within each Academic Department, senior grant administrative officials are tasked with the management and oversight of sponsored projects to ensure compliance with Federal and University policies and procedures. Such officials typically assist and advise faculty members with the management of Federal grants and are responsible for ensuring that awards and their budgets are created accurately in the financial system; award expenditures are monitored on a monthly basis; and charges to Federal awards are appropriate. They also ensure Principal Investigators (PIs) confirm the reasonableness of employee salary charges on their effort reports. However, PIs have primary responsibility for all aspects of Federally-sponsored projects including approval of all charges and ensuring that the research is conducted in accordance with the award terms and conditions.

## **OBJECTIVES, SCOPE AND METHODOLOGY**

**Audit Objectives.** Our audit objectives were: (a) to evaluate whether Wisconsin's internal controls are adequate to properly manage, account for, monitor, and report salary and wage costs on NSF grants in accordance with OMB and NSF grant requirements and (b) to determine if salaries and wages charged to NSF awards are allowable, allocable and reasonable in accordance with Federal cost principles and NSF award terms and conditions.

**Scope and Methodology .** The audit focused on Wisconsin's effort reporting system, and accordingly reviewed internal controls for ensuring that labor costs charged to NSF (i) were actually incurred, (ii) benefited NSF awards, (iii) were accurately and timely recorded and charged to NSF, and (iv) were for allowable and allocable-type activities as required by Federal and NSF requirements. In addition, we evaluated if the level of PI effort pledged in grant proposal and award documents was actually contributed by the faculty member to accomplish award objectives.

To address each of the control objectives, the NSF-OIG engaged a statistician to provide expert advice in selecting a statistical sample of employee salary records for testing. The use of statistical tools and methodology will enable projecting our audit results to the entire population of universities to be included in the planned reviews of payroll distribution systems nationwide. However, due to the small statistical sample size of 30 employees tested, we are not able to make any projections to the total Wisconsin population of labor costs charged to NSF grants. Specifically, the FY 2007 salary and wage costs for the 30 sample employees tested amounted to \$753,074 and were supported by 64 Personal Activity Reports (PAR) and Effort Certification & Reporting Technology (ECRT) effort reports.

We interviewed key Wisconsin officials, and reviewed the organization structure, and written policies and procedures to assess the "attitude" or "tone at the top" toward grants management and compliance in general as it affects effort reporting.

We compared Wisconsin's policies and procedures to Federal and NSF requirements for allocating labor costs to Federal awards and interviewed personnel to gain an understanding of the controls in place to ensure salary and wages charged to NSF awards were reasonable and allowable. For each statistically selected salary record, we obtained the following documentation to determine whether labor costs at Wisconsin charged to NSF awards met the control objectives:

- Effort reports documenting 100 percent of each employee's compensation allocated to sponsored and non-sponsored projects for each reporting period.
- Appointment letters or other documents supporting the approved annual salary for employees.
- Salary Payment History Reports (SPHR) detailing the actual salary and wages charged to sponsored projects and other activities for each employee during each reporting period.
- Award documents to determine whether the grant had any terms and conditions that would affect allowable labor charges to the award.

To ensure that salary and wage costs charged to NSF awards were incurred and benefited NSF awards, we corroborated the information on the effort reports by interviewing the 30 sampled employees. We inquired whether (a) the labor charges documented were actually incurred on projects and activities, (b) the approximate percentage of effort actually worked on each sponsored project and/or activity was reasonably consistent with NSF labor charges, and (c) the type of work performed on NSF projects was generally consistent with the scope of the awards. We also interviewed administrative officials in the Academic Departments of the sampled employees to determine procedures for processing and monitoring employee salary charges to Federal grants. Additionally, we interviewed selected PIs to determine the number of projects and personnel they were responsible for and their processes for verifying effort reporting.

To confirm that faculty effort pledged in grant proposals was actually contributed to accomplish grant objectives, we reviewed processes for reporting and tracking PI effort. We reviewed award documents for all Federal grants that a faculty member worked on during FY 2007 to determine the effort pledged on each project and compared this proposed effort to the approximate percentage of actual effort worked on the project. In addition, we determined whether and how Wisconsin tracked and documented PI effort on sponsored projects when no faculty salary support was requested or reimbursed by the Federal Government.

To determine whether labor costs were accurately recorded and charged to NSF, we compared the amounts in appointment letters or other documentation supporting salaries and wages paid to the amounts recorded in the SPHR for each individual in our selected sample. We recalculated salary and wage costs charged to NSF projects by using the salary shown on supporting documentation and apportioning it by the period of

time represented on the effort reports. We also reviewed labor transactions to determine whether Wisconsin followed Federal, NSF, and University requirements on charging labor costs to NSF projects.

The audit determined whether Wisconsin officials approved and signed effort reports in a timely manner by comparing the date the effort reporting period ended to the date the reports were approved and signed. Timeliness was based on Wisconsin's internal policy requiring that effort reports are completed and signed in accordance with the policy.

Finally, we reviewed prior audit reports on Wisconsin's Federal grants management program performed by OMB Circular A-133 auditors and Wisconsin's internal auditors to determine whether there were any audit findings and recommendations on labor effort reporting. Specifically, we interviewed the director of internal audit and a staff and reviewed their reports, as needed, to gain an understanding of the scope and procedures used in any audits of Wisconsin's payroll distribution reporting system and/or management of labor costs charged to Federal projects. Review of the A-133 audit working papers is performed to ascertain the actual audit scope and procedures used by the auditors in order to (i) preclude any duplicative audit work and (ii) to determine the specific work performed on the labor effort reporting system. Accordingly, we met with Wisconsin's A-133 auditors, specifically the director and supervisor to discuss their overall audit scope and procedures used for reviewing salaries and wages charged to Federal awards and the labor effort reporting system.

On-site audit work at the Wisconsin campus was performed during two 2-week periods in March and July 2008. The remainder of the audit work was completed through phone interviews, emails, and documentation requests through June 2009. We were engaged to perform the above audit objectives by the NSF-OIG and the audit was conducted in accordance with the Comptroller General's *Government Auditing Standards* and accordingly included such tests of accounting records and other auditing procedures, as we considered necessary, to fully address the audit objectives.

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## FINDING AND RECOMMENDATIONS

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### **Improvements Needed in the Payroll Distribution and Effort Reporting System**

#### OMB Requirements and University Policy for Labor Effort Reporting

Circular A-21, *Cost Principles for Educational Institutions*, recognizes that each institution “should employ sound management practices” in applying the Federal cost principles for charging costs on sponsored projects. Specifically, “the recipient institution is responsible for ensuring that costs charged to a sponsored agreement are allowable, allocable, and reasonable under these cost principles” and “must provide for adequate documentation to support costs charged to sponsored agreements.”<sup>1</sup> Thus, Wisconsin is required to have written procedures to ensure costs charged to sponsored projects are in full compliance with Federal cost principles and the terms and conditions of the sponsored agreement. In addition to the day to day oversight, the Circular also requires Universities to provide for periodic independent internal evaluations to ensure the effort reporting system is effective and compliant with Federal standards.

Consistent with the Circular A-21 requirement for “sound business management practices,” OMB Circular A-110, *Uniform Administrative Requirements for Grants and Agreements with Institutions of Higher Education, Hospitals, and Other Non-Profit Organizations*,<sup>2</sup> requires entities receiving Federal awards to establish and maintain internal controls that are designed to reasonably ensure compliance with Federal laws, regulations, and program compliance.

OMB Circular A-21 requires certification of labor effort/activity contributed by employees on Federal awards. Specifically, paragraph J10.b. (2) states a payroll distribution system is required that will “...reasonably reflect the activity for which the employee is compensated by the institution; and encompass both sponsored and all other activities on an integrated basis”. Such a system must provide for after-the-fact confirmation of employee activity by a responsible person with “suitable means of verification that the work was performed.” Wisconsin’s Effort Reporting Manual echoes this requirement.

Finally, the National Science Foundation’s *Grants Policy Manual*, limits the amount that can be funded for academic personnel to no more than two-ninths of the individual’s academic base salary. This is commonly referred to as NSF’s Two-Ninths Rule. This limit includes salaries received from all NSF-funded grants.

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<sup>1</sup> Paragraphs C.4.d. (1) and A.2.e., respectively, of OMB Circular A-21, *Cost Principles for Educational Institutions*.

<sup>2</sup> Section .21 of OMB Circular A-110, requires that a grantee’s financial management system provide for “Effective control over and accountability for all funds, property, and assets. . . written procedures for determining the reasonableness, allocability and allowability of costs in accordance with the provisions of the applicable cost principles and terms and conditions of the award.”

## Wisconsin's Effort Reporting System

Wisconsin used two time and effort reporting systems in fiscal year 2007. The Personal Activity Report (PAR) system, launched in 1983, was in use for faculty, students, and most staff through December 2006. The PAR system produced bi-annual effort reports for all faculty and academic staff and quarterly effort reports for classified staff that RSP distributed to the departments and colleges for certification. The PAR system was replaced by the web-based Effort Certification & Reporting Technology (ECRT) system for the six month period ended June 30, 2007. The ECRT system also produces bi-annual effort reports for all faculty and academic staff and quarterly effort reports for classified staff. With the implementation of the new system, Wisconsin also implemented significantly revamped policies and procedures and mandatory training. Wisconsin has a decentralized operational structure in which each school or college is partially responsible for the management of its Federal grants including certification of effort reports. However, the Office of Research and Sponsored Programs (RSP) has the overall responsibility for effort certification and reporting process at the University of Wisconsin.

RSP shares implementation and oversight with the 166 departments and offices of the University. RSP provides leadership in policy establishment and effective control structure. They are also responsible for ensuring that the various departments and office staff are adequately prepared through training, policy, procedures, and instructions dissemination, and individual assistance.

However, the audit disclosed that during part of the period, Wisconsin did not: have an effective oversight program to identify and correct control weaknesses in the effort reporting system; comply with NSF summer salary limitations; and provide adequate training for university personnel involved in the effort reporting process.

## Wisconsin's Oversight and Independent Evaluation of the Effort Reporting System

Prior to the implementation of the new system, Wisconsin had not established effective controls for either day to day oversight or periodic independent reviews. Wisconsin's decentralized effort reporting structure increases the need for strong day to day oversight. However, based on a 2006 review of effort reporting system by a consultant as well as additional weaknesses found in our audit, the control structure requires additional strengthening. For example,

In 2006, as part of the implementation process for the new web-based ECRT system, Wisconsin requested that a consulting group conduct a "snapshot review" of the current state of its effort reporting system. The independent review performed in accordance with the requirements of OMB Circular A-21, revealed compliance and internal control weaknesses which included:

- All effort reports not adding up to 100 percent and encompassing all professional effort.

- Improvements in training needed.
- No formal procedures for tracking and monitoring effort commitments.
- PARs not timely received by Office of Research and Sponsored Programs.
- Procedures for tracking cost sharing make it difficult to determine if key personnel are meeting their cost commitments.
- Delays in processing cost transfers.

Wisconsin's Internal Audit also conducted a review in 2006 that revealed similar problems to those cited in the consulting group's review, which was completed prior to Internal Audit's evaluation. This review was the first conducted by Internal Audit since the PAR system was implemented. According to Wisconsin officials, the ECRT system was implemented to correct weaknesses identified in the consulting group's and Internal Audit's reviews. Our testing confirmed that most weaknesses were corrected with implementation of the ECRT system. However, we did identify additional weaknesses addressed in this report that require correction and indicate the need for additional internal control policies and procedures.

Further, Wisconsin did not perform periodic comprehensive independent evaluations of the effort reporting system. In fact, no documented comprehensive evaluations were performed from 1983 through 2005. Wisconsin stated, "During the period of the 1980's and early 1990's, representatives from our cognizant audit agency, the Department of Health and Human Services (DHHS), were located on-site at the University. Their role was to perform audits as requested by federal agencies. Because of the DHHS presence on campus, the annual A-133 audit, and the priorities and risks identified at the federal, state, and university levels, the risk assessments for previous periods determined that effort reporting was a lower risk area for audit." As noted; however, we were not able to obtain documented evidence of comprehensive reviews. Even if comprehensive reviews had been conducted during DHHS's on-site presence, between 10 – 15 years had passed since DHHS had the on-site presence.

Thus, the PAR effort reporting system may not have been thoroughly reviewed for compliance to Federal guidance since its launch in 1983. These reviews are critical for ensuring institutions' systems are compliant with Federal requirements and reasonably reflect the activity for which the employee is compensated by the institution. If Wisconsin had conducted periodic comprehensive independent internal evaluations of its effort reporting system, the compliance and internal control weaknesses in this and previous reports would have likely been identified and timely corrected.

#### Faculty Summer Salary - NSF 2/9ths Rule.

Wisconsin did not fully comply with NSF's salary limitations for faculty research leading to overcharging NSF grants. Specifically, the audit disclosed that two of the four PIs in our sample improperly exceeded NSF's summer salary limitations during the summers of fiscal years 2006 and 2007. The overcharges to NSF amounted to \$2,941

including fringe and overhead<sup>3</sup>. Although the Wisconsin's *Effort Reporting Guidelines* reminds investigators of the NSF's two-ninths rule limiting faculty summer salaries to no more than two-ninths of academic salary, neither the PIs nor RSP factored raises into their calculations to ensure adherence to the rule. Wisconsin determines the rate of summer pay by dividing the individual's base salary at the time of the summer appointment (usually in May) by 9 (the number of months that the base salary covers) and paid up to the 2/9<sup>th</sup> limit of NSF. When the faculty received salary increases in April, their salary was increased just for 2 months. It was not retroactive for the full year. Therefore, when calculating the 2/9<sup>th</sup> limit Wisconsin needed to prorate the individual base salary appropriately before calculating the summer pay rate. While the overcharges are not individually significant, based upon our testing, over \$753 thousand of the \$31 million in faculty labor charges are at risk for incorrect charging to NSF in FY 2007<sup>4</sup>.

### Effort Report Training

Prior to the implementation of the new ECRT system, the University did not require effort reporting training on federal awards for Principal Investigators, Deans, Department heads, or other persons involved in the effort reporting process. In fact, Principal Investigators indicated they had not received training under the old PAR system. Further, neither RSP nor the individual college grant administrators were required to have effort reporting training even though they are responsible for providing guidance and advice on effort reporting. Interviews with RSP and a PI indicated they believed that the information and instructions printed on the reverse side of the PAR provided sufficient information that mandatory training was not necessary. However, the instructions only provide an overview of effort reporting solely as it relates to certification of the report. The broader perspective of effort reporting and some specifics such as prospective changes, salary transfers, significant changes, and the salary limitations are not addressed on the form and require additional training.

The University did not have a training policy until the implementation of the new ECRT effort reporting system at which time Wisconsin mandated training for everyone involved in the effort reporting process.

### Factors Contributing to Effort Reporting Weaknesses

These weaknesses occurred because Wisconsin, prior to FY 2006, did not place sufficient emphasis on the effort reporting process. Specifically, policies and procedures did not address and/or contain sufficient detail to ensure compliance with Federal requirements through an effective oversight program or establish a comprehensive and continuous training program for key personnel. Such policies, procedures and controls serve to institutionalize processes and provide continued emphasis for an overall control environment.

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<sup>3</sup> See Appendix A for Breakdown of overcharge to NSF as a result of NSF 2/9<sup>th</sup> Rule

<sup>4</sup> Based upon the percentage of overcharge to the PIs' salary applied against the total faculty labor charges.

### *Policy and Procedures Weaknesses*

- *Day to day oversight.* Prior to ECRT and finalization of new policies and procedures in early 2008, Wisconsin did not have sufficient policies and procedures in place to establish a program to provide adequate oversight of the effort reporting process. As evidenced by the results of the consultant's and Internal Audit's reviews, Wisconsin did not ensure that established policies and procedures were adhered to nor that the individual departments and offices had structures in place to ensure compliance with timelines, commitments, and cost sharing, for example. Considering Wisconsin's decentralized organizational structure, 166 departments and offices with shared responsibility for management of their own portfolio of Federal grants, the need for strong and consistent oversight is necessary to identify and correct deficiencies in a timely manner in order to maintain the overall integrity of the effort reporting system. In November 2007, Wisconsin implemented significantly revamped policies and procedures which included a compliance effort reporting policy supported by upper management that included consequences for non-compliance.
- *Independent Internal Evaluations.* In addition, Wisconsin did not establish policies to meet OMB requirements for independent internal evaluations. Specifically, University officials believed they met the A-21 requirement with their annual OMB Circular A-133 audit and the past presence of DHHS audit staff.<sup>5</sup> However, the A-133 audit was not, nor intended to be, a comprehensive review of the effort reporting system. While the A-133 audit procedures for effort reporting at Wisconsin cover some aspects of effort reporting, the audit is not designed to be detailed or comprehensive. Further, regardless of whether DHHS had conducted comprehensive reviews of the effort reporting system, they have not been on-site since the early 1990's.

Thus, Wisconsin had not established any policies or procedures for a periodic and systemic review of a system that has been operating for over 23 years. Such comprehensive evaluations would have likely disclosed internal control deficiencies and recommended improvements such as those identified by the consulting firm prior to implementation of the ECRT system.

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• <sup>5</sup> Under the Single Audit Act of 1984 (Public Law 98-502) as amended in 1996 (Public Law 104-156), non-Federal entities that expend \$500,000 or more a year in Federal awards are required to have an organization-wide audit that includes the non-Federal entity's financial statements and compliance with Federal award requirements. The OMB Circular A-133 established uniform requirements among Federal agencies for audits of States, Local Governments, and Non-Profit Organizations.

Wisconsin stated they were currently working with Internal Audit to determine the appropriate schedule for future regular, continuing evaluations of effort reporting processes and practices at Wisconsin based on a comprehensive risk assessment of financial compliance responsibilities

- *NSF's Two-ninths Rule.* Wisconsin did not have a process that fully implemented NSF's two-ninths rule on faculty summer pay. Specifically, there were no policies and procedures to cover supplemental compensation when computing PIs' summer salaries for conformance with NSF policy.
- *Employee Training For Key Officials Was Not Mandatory.* PIs and department administrative officials are important officials for effort reporting. As part of the implementation of ECRT Wisconsin has developed a comprehensive on-site and web-based labor effort and grants management training program, encompassing a wide range of Federal grants management subjects, including labor effort reporting policies and procedures. However, Wisconsin has not instituted a policy going forward for effort reporting training that would provide procedures and requirements for periodic refresher courses for key officials.
- *Suitable Means of Verification Requires Definition.* Federal grant requirements provide that salary and wage charges to sponsored projects be supported by labor effort reports signed and approved by the employee or an official who is in a position to know whether the work was performed. Wisconsin has a policy requiring officials signing effort reports to have a suitable means of verification that reported effort is accurate. However, the policy did not define what constituted a "suitable means of verification"; require documentation by the signing official that they obtained such verification, or hold certifying officials accountable for following certification policies and procedures.

### Effort Reporting Reliability and Excess Labor Charges

These internal control weaknesses provide less assurance over the reasonable support for the \$31 million of FY 2007 labor charges to NSF grants, as well as the salary portion of Wisconsin's other \$594 million of Federal awards. In addition, Wisconsin's lack of policies and procedures on NSF's two-ninths rule allowed Wisconsin to overcharge NSF \$2,941 in salary and associated fringe benefits. While the overcharges were not individually significant, we estimate that over \$753 thousand in FY 2007 NSF labor charges were at risk for overcharging due to this weakness.

## Recommendations

We recommend that the NSF Director of the Division of Grants and Agreements and the Director of the Division of Institution and Award Support, coordinate with the cognizant audit agency, as needed, to implement the following recommendations:

1. Develop and implement clear written policies and procedures:
  - a. For a periodic independent internal evaluation of the effort reporting system to ensure its effectiveness and full compliance with Federal, NSF, and University standards. Such a requirement should identify the specific organization responsible for performing the evaluation and how often such an evaluation should be conducted.

### **University of Wisconsin - Madison Response**

Wisconsin is currently working with UW Internal Audit to determine the appropriate schedule for future, regular evaluations of effort reporting processes and practices based upon a comprehensive risk assessment.

### **Auditors' Comments**

Once implemented, Wisconsin's actions should address our audit recommendation.

- b. That enhances the policy on supplemental compensation to include controls to ensure that the pay received by faculty for compensation from NSF corresponds to 2/9<sup>th</sup> of their base salary.

### **University of Wisconsin - Madison Response**

The University will review its policies and practices on the application of NSF's 2/9<sup>th</sup> rule to ensure we are appropriately compensating faculty in keeping with the NSF interpretation of the rule.

### **Auditors' Comments**

Once implemented, Wisconsin's actions should address our audit recommendation.

- c. That requires key personnel to attend periodic training on the effort report process and grant management. Such training should include a thorough discussion of effort certification responsibilities and requirements and the various types of employee activities that do not directly benefit, and should therefore not be charged to federal awards.

### **University of Wisconsin - Madison Response**

The University currently provides mandatory effort training for all faculty and staff who certify effort, but the auditors were concerned about provisions for refresher courses for certifiers. We agree to continue our initial training programs and to make a refresher course available for all certifiers. In addition, we agree to provide updates to faculty and staff when changes are made in UW policy or in the underlying Federal regulations regarding effort reporting.

### **Auditors' Comments**

Once implemented, Wisconsin's actions should address our audit recommendation.

- d. To define what constitutes a suitable means of verification and what documentation is required to be maintained by verifying officials.

### **University of Wisconsin - Madison Response**

The University will work to define suitable means of verification and documentation thereof consistent with relevant Federal guidelines.

### **Auditors' Comments**

Once implemented, Wisconsin's actions should address our audit recommendation.

2. Resolve the questioned cost of \$2,941 for overcharges in violation of NSF's two-ninth's rule.

### **University of Wisconsin - Madison Response**

We agree to refund the questioned cost of \$2,941. We will wait for instructions from the Division of Grants and Agreements on processing payment since the two projects are closed. However, we believe there is room for further discussion on the interpretation of the NSF Two-Ninths Rule as it applied in FY 07.

### **Auditors' Comments**

Once implemented, Wisconsin's actions should address our audit recommendation. We also concur with Wisconsin, that there are apparent ambiguities and conflicting statements in the NSF Two-Ninths Rule guidance. However, NSF has sustained all our questioned costs related to the application of the Two-Ninths Rule in prior effort report audits. Further, Wisconsin was

the first university to provide us with a different interpretation of this rule. Thus, we stand by our position that the NSF policy restricts the transfer of funds into a salary budget category that would cause a PI's actual salary to exceed two-ninths of the academic year salary. However, in light of the varied interpretations and confusion among grantees, we agree that Wisconsin should request NSF to provide clear guidance on the Two-Ninths Rule.

**Appendix A – Salary Overage Breakdown**

Calculation of Salary Overcharge Resulting from NSF's 2/9<sup>th</sup> Rule

<b>Sample Number</b>	<b>Academic Year</b>	<b>Institutional Base Salary (IBS)</b>	<b>2/9<sup>th</sup> IBS</b>	<b>Summer Salary paid</b>	<b>Salary Over 2/9<sup>th</sup> IBS</b>	<b>Fringe</b>	<b>Overhead</b>	<b>Total Salary Over IBS 2/9<sup>th</sup></b>
1	2006	\$88,985	\$19,774	\$20,314	\$540	\$189	\$254	\$983
	2007	\$94,457	\$20,990	\$21,471	\$481	\$168	\$226	\$875
2	2007	\$115,648	\$25,699	\$26,294	\$595	\$208	\$280	\$1,083
<b>TOTAL</b>			<b>\$66,463</b>	<b>\$68,349</b>	<b>\$1,616</b>	<b>\$565</b>	<b>\$760</b>	<b>\$2,941</b>



OFFICE OF RESEARCH AND SPONSORED PROGRAMS

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October 19, 2009

  
Williams, Adley & Company, LLP  
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Dear Ms. Duckett:

Thank you for the opportunity to comment on the audit report for the NSF OIG effort audit at the University of Wisconsin – Madison. We are responding to the document dated September 30, 2009, and we appreciate your assistance in refining some earlier language that was enhanced by clarification. Both your staff and the representatives from NSF OIG have been professional, facilitative, and collaborative. I believe their approach to this audit encouraged our interactions with them to be uniformly positive and congenial, certainly in keeping with the mission of the NSF.

Upon reflection, I find the audit has confirmed the strength of University of Wisconsin – Madison programs, the benefits of our investment in effort reporting systems, and the cooperative nature of our faculty and administrators. We will use the recommendations from this audit to further improve our educational and oversight responsibilities in effort reporting.

Below please find our responses to the audit recommendations.

**Recommendations**

*We recommend that the NSF Director of the Division of Grants and Agreements and the Director of the Division of Institution and Award Support, coordinate with the cognizant audit agency, as needed, to implement the following recommendations:*

1. *Develop and implement clear written policies and procedures:*
  - a. *For a periodic independent internal evaluation of the effort reporting system to ensure its effectiveness and full compliance with Federal, NSF, and University standards. Such a requirement should identify the specific organization responsible for performing the evaluation and how often such an evaluation should be conducted.*

**UW Response:**

**Wisconsin is currently working with UW Internal Audit to determine the appropriate schedule for future, regular evaluations of effort reporting processes and practices at UW – Madison based on a comprehensive risk assessment of financial compliance responsibilities.**

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- b. That enhance the policy on supplemental compensation to include controls to ensure that the pay received by faculty for compensation from NSF corresponds to 2/9<sup>th</sup> of their base salary.*

**UW Response:**

The University will review its policies and practices on the application of the NSF Two-Ninths Rule to ensure we are appropriately compensating faculty in keeping with the current NSF interpretation of the Rule. Please see additional comments on the Two-Ninths Rule in our response to Recommendation #2 below.

- c. That requires key personnel to attend periodic training on the effort report process and grant management. Such training should include a thorough discussion of effort certification responsibilities and requirements and the various types of employee activities that do not directly benefit, and therefore should not be charged to federal awards.*

**UW Response:**

The University has taken every opportunity to make training for our faculty and staff easily accessible and timely, targeting the key principles of effort reporting and encouraging our certifiers to understand their responsibilities for managing federal funds. Training programs, effort reporting tools, and reference documents are all readily available so that individuals can enhance their understanding of effort reporting or look up a specific question at their convenience. The University currently provides mandatory effort training for all faculty and staff who certify effort, but the auditors were concerned about provisions for refresher courses for certifiers. We agree to continue our initial training programs and to make a refresher course available for all certifiers. In addition, we agree to provide updates to faculty and staff when changes are made in UW policy or in the underlying federal regulations regarding effort reporting.

- d. To define what constitutes a suitable means of verification and what documentation is required to be maintained by verifying officials.*

**UW Response:**

The University of Wisconsin – Madison will work to define suitable means of verification and documentation thereof consistent with relevant Federal guidance.

- 2. Resolve the questioned cost of \$2,941 for overcharges in violation of NSF's two-ninth's rule.*

**UW Response:**

Given the overall positive tenor of this audit and in order to resolve this matter, we agree to refund the questioned cost of \$2,941. We will wait for instructions from the Division of Grants and Agreements on processing payment since the two projects are closed. However, we believe there is room for further discussion on the interpretation of the NSF Two-Ninths Rule as it applied in FY 07, and following is an explanation of our viewpoint:

## Appendix B – Wisconsin Response to the Audit Report

In October 2008, NSF issued a new Grant Proposal Guide (GPG), NSF 09-01, which reflected "a major revision of NSF's salary reimbursement policy. In general, the Foundation will **now** [emphasis added] limit salary compensation for senior project personnel to no more than two months of their regular salary in one year. . . ."

Prior to GPG, NSF 09-01, there was not a limit on salary compensation for senior personnel on NSF grants. We believe Wisconsin applied the two-ninths rule, as it was generally understood by the university community and reflected in the NSF Grant Policy Manual effective July 15, 2005. That manual, which was eventually superseded by the GPG, was in effect during Fiscal Year 2007 when the disputed charges occurred.

- The Grant Policy Manual, NSF 05-131, effective July 15, 2005, addresses the two-ninths rule in 611.1: ". . . Proposal **budgets** submitted should not request, and NSF-approved **budgets** will not include, funding for an individual investigator which exceeds two-ninths of the academic year salary." This section, which was the heart of the two-ninths rule, clearly speaks to proposal budgets, not to allowable compensation.
- In 603.1, the Grant Policy Manual states, "NSF has waived most cost related and administrative prior approvals required by OMB Circulars A-21 and A-110. Grantees should refer to the general conditions referenced in the grant, and the Grant Policy Manual Exhibit III-1 for information on NSF required prior approvals."
- Grant Policy Manual Exhibit III-1, "Grantee Notifications to and Requests for Approval", lists Change in Person-Months Devoted to Project as a topic that may require prior approval. Section 312.5 lays out the conditions that may require NSF approval. Those conditions only apply to the absence of an investigator or to a situation in which the investigator devotes less time than planned to the project. There are no prior approval requirements for transferring funds in order to support additional person-months by the investigator.
- Finally, Section 321 states, "NSF elects NOT to impose the following requirements on its grantee: ". . . b. restrictions in transfers of funds among direct cost categories for grants in which the Federal share exceeds \$100,000." Section 322 confirms, "If required in furtherance of the project, the grantee is authorized to transfer funds from one budget category to another for allowable expenditures. . . ."

The University of Wisconsin – Madison applied those sections of the two-ninths rule cited above and transferred funds into the salary budget categories for the salaries of the two investigators in question in FY 07. Further, the two investigators certified that the amounts charged were consistent with the level of effort expended. We believe our salary payments were allowable and allocable according to the NSF policies in effect at the time. While NSF policies changed with the application of the October 2008 GPG, Wisconsin acted under the applicable NSF policies for NSF projects in FY 07.

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If you have any questions about our response, we would be happy to provide clarification.  
Thank you for your consideration.

Sincerely, [REDACTED]

[REDACTED]  
Associate Vice Chancellor for Research  
Administration and Director, Research and  
Sponsored Programs