## NATIONAL SCIENCE FOUNDATION 4201 Wilson Boulevard ARLINGTON, VIRGINIA 22230



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OFFICE OF

# MEMORANDUM

Date:	JUL 7 2006
То:	Mary Santonastasso, Director, Division of Institution and Award Support (BFA/DIAS) Jubuk H. Curtm- Deborah H. Cureton
From:	Deborah H. Cureton Associate Inspector General for Audits
Subject:	Review of NSF Policy on University Facility and Administrative (F&A) Cost Rates, OIG-06-2-011

This letter report brings to your attention an inconsistency between provisions of NSF's Grant Policy Manual (GPM) and Office of Management and Budget (OMB) Circular A-21, <u>Cost Principles for Educational Institutions</u>, regarding the appropriate Facility and Administrative (F&A) cost rates to be applied to NSF grants. While OMB Circular A-21 requires universities to use F&A rates in effect at the time of initial award throughout the life of sponsored agreements, the GPM allows grantees an option to use newly negotiated Federal F&A rates taking effect after the initial award date. Such GPM procedures are contrary to OMB's stated objective to provide consistent Federal grant policies and results in creating confusion in the awardee community.

The OMB Circular A-21 requirement, to use a fixed F&A rate for the entire life of an award, preserves and/or holds constant the level of direct research funding authorized by the Federal Government at the time of original award throughout the life of a sponsored project. It allows the principal investigators, the universities, the peer reviewers, and the Federal sponsoring agencies to know with certainty the total direct research costs of a Federally-sponsored agreement throughout its entire life; regardless of whether the university's negotiated F&A rates are increasing and/or decreasing.

To the contrary, the GPM option does not preserve and/or hold constant the level of direct research funding agreed to by the respective parties at the time of original NSF

award. During times of increasing F&A rates, the GPM option would allow universities to shift NSF funding from direct research activities to support increased indirect costs; potentially compromising the full accomplishment of grant objectives. Conversely, during times of decreasing F&A rates, if the university chooses to implement the GPM option, additional NSF grant funds would be shifted to fund direct research activities.

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Accordingly, we initiated a review to determine (a) whether educational institutions are using the GPM option permitting the use of newly negotiated F&A rates for claiming indirect grant costs and (b) the dollar impact that such practices would have on NSF research funds. In order to accomplish our objectives, we researched the applicable <u>Federal Register</u> announcements to gain an understanding of OMB's current requirement in Circular A-21 to use a fixed F&A rate for the entire life of a grant. Furthermore, we searched university websites to identify established policies and procedures for applying approved F&A rates to Federal grants. For those educational institutions with established procedures permitting the use of newly negotiated rates for reimbursement of indirect costs, we interviewed University officials by telephone to ascertain the actual practice used on NSF grants. Also, we identified the trends in the F&A rates for the 9-year period from fiscal years 1997 to 2005 at the top 100 universities funded by NSF. The review was conducted in accordance with *Government Auditing Standards* and included procedures, as deemed necessary, to fully address the objectives.

## OMB Circular A-21 Revision Provides for Fixed F&A Cost Rates On Federal Grants

On May 8, 1996, OMB revised Circular A-21 to require that fixed F&A cost rates be used on Federal grants during the entire life of a sponsored agreement. OMB's stated purpose for making the subject change was to eliminate inconsistency in Federal grant policies and to preserve the level of research funded by the Federal Government at the time of original grant awards. At the time the revision was issued, OMB explicitly stated in the Preamble of the <u>Federal Register</u> notification,<sup>1</sup> that NSF's policy of using different negotiated F&A rates for "funding and reimbursement" of indirect grant costs was not consistent with the new Circular A-21 requirement. However, NSF did not change its GPM procedures in this regard.

Specifically, OMB Circular A-21, Subpart G, paragraph 7a, *Fixed rates for the life of the sponsored agreement* states that:

"Federal agencies shall use the negotiated rates for F&A costs in effect at the time of the initial award throughout the life of the sponsored agreement... Award levels for sponsored agreements may not be adjusted in future years as a result of changes in the negotiated rates."

<sup>&</sup>lt;sup>1</sup> In the <u>Federal Register</u> (61 FR 20884, May 8, 1996) announcing the "Final Revision and Compilation of OMB Circular A-21," (see Appendix A for a full text) OMB stated that the new provision requires that a fixed rate be used for both "funding and reimbursement" of F&A costs during an award's life. This was contrary to NSF's position that fixed F&A rates should be used only for "funding" a total project during the proposal and approval stage, but not required to be used for subsequent "reimbursement" of university F&A costs during the life of the sponsored agreement.

Prior to the above change in May 1996, Circular A-21 did not specify the indirect cost rate that should be used during the life of a grant. In proposing this new fixed rate provision, OMB announced in the Federal Register (60 FR 7107, February 6, 1995) that:

"... Funding agencies may not adjust future award levels for changes in negotiated rates taking effect after the initial award. This proposed change allows peer reviewers and funding agencies to know with certainty the total cost of an entire sponsored agreement throughout the decision making process, and eliminates another point of inconsistency in Federal grant policies."

This subject A-21 provision has remained unchanged during subsequent Circular A-21 updates including the most recent revision made on May 10, 2004. Thus, OMB has reaffirmed the Federal Government's requirement that educational institutions must use the F&A rate in effect at the time of initial award throughout the life of a sponsored agreement for both "funding and reimbursement" of indirect costs.

# NSF's F&A Cost Policy Not Consistent With OMB Requirement

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However, NSF has never revised its GPM to be consistent with provision G.7 of OMB Circular A-21. The current GPM, issued in July 2005, still inappropriately allows NSF grantees the option to apply new negotiated F&A rates in effect at the time indirect costs are "reimbursed" rather than a fixed rate for the life of a sponsored agreement, as required by the OMB Circular. Specifically, paragraph 633.1b.2 of the GPM section on *Indirect Costs* states:

"Predetermined Fixed Rate: A predetermined fixed rate is a permanent funding rate established for an award based on an estimate of costs for that period. Grantees may charge NSF projects at the rate(s) stipulated in the award. However, should negotiations between the organization and the cognizant Federal agency result in changes in the approved indirect cost rate not reflected in the NSF award, the grantee may charge NSF projects at the newly negotiated rate in effect at the time direct cost expenditures are made..." (emphasis added)

Due to changes in NSF staffing since 1996, we could not determine why NSF has never changed its GPM. Yet, in the Preamble section of the <u>Federal Register</u> (61 FR 20884, May 8, 1996) announcing the Circular A-21 revision, OMB explicitly stated that NSF's policy of utilizing a fixed F&A rate only for "funding" total indirect project costs, but not "reimbursement" was not consistent with the newly revised provision G.7 as follows:

"Current NSF policies award a fixed amount (direct and F&A costs) for the conduct of an entire project. This policy allows the educational institution to recover more F&A costs than originally budgeted as long as the total reimbursement for the project does not exceed the funding for the total award.

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The revision in Section G.7 provides that a fixed rate shall be used for both funding and reimbursement of F&A costs during an award's life... This policy assures that the Federal Government is receiving the level of services (i.e. research) agreed to by the educational institution and the Federal agency when the award was made. If the fixed rate concept is used for only funding of the award and not reimbursement of F&A costs, during periods of increasing rates, while the total funding for the award remains the same, then a shift of funding available for direct costs to F&A costs would occur. Therefore, the funding available for direct cost activities would decrease and so would the level of services (or research)." (Emphasis added; see Appendix A for the full text of NSF's comment and OMB response).

Clearly, OMB stated that the new Circular A-21 provision required NSF to use a fixed F&A rate for both "funding and reimbursement" of indirect costs during the life of a sponsored agreement.

## University Indirect Cost Procedures

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Our review of 23 of NSF's top 100 funded universities found inconsistent policies and procedures for applying negotiated F&A cost rates to Federal grants. Policies at 14 of the 23 institutions required the use of fixed F&A cost rates for the entire life of the grant as required by Circular A-21; while policies at nine institutions allowed for using the newly negotiated rates at the time of "reimbursement" as permitted in NSF's GPM. Specifically, the nine universities, having a policy consistent with the GPM option, were the various campuses of the University of California. This occurred because its Office of the President (UCOP) had issued policy in the University's <u>Contract and Grant Manual</u><sup>2</sup> stating that "the appropriate indirect cost rate for an award is generally the applicable approved rate that is in effect at the **time of performance** . . ." Similar to the GPM, the UCOP policy only required the use of the fixed F&A rate in effect at the time of award for "funding" a Federal award during the proposal stage, but not for subsequent "reimbursement" of the indirect costs on grants.

Nevertheless, contrary to this policy, we found that the nine University of California campuses were not consistently applying the UCOP policy for budgeting and recovering F&A costs on NSF grants. Three of the campuses were using the GPM option of applying newly negotiated F&A rates to NSF grants at the time of "reimbursement" and the remaining six were following the Circular A-21 requirement by applying the F&A rate agreement in effect at time of award for the life of the grant. This suggests that the inconsistency between NSF's GPM procedures and OMB Circular A-21 requirements have resulted in confusion at the nine University of California campuses.

<sup>&</sup>lt;sup>2</sup> Section 8-700, *Budgeting and Recovering Indirect Costs*, of the <u>Contract and Grant Manual</u> issued by the Research Administration Office of the University of California's Office of the President. The policy endorsed both OMB Circular A-21 and NSF's GPM methodologies of recovering F&A costs. We obtained clarification from the UCOP's Research Administration Office to determine which methodology was preferred. UCOP preferred to use the rate in effect at "time of performance," consistent with NSF's option..

The three campuses using the GPM option had received \$1.4 billion or 46 percent of the total NSF funds awarded to the nine campuses for the 9-year period from FYs 1997 to 2005. While this is a significant amount of NSF funding, our analysis disclosed that the negotiated F&A cost rate at these three campuses only increased a small amount over the 9-year time period; averaging a 1.5 percent increase from 48.3 percent to 49.8 percent. Therefore, the potential monetary impact on NSF grant funds being shifted from direct research costs to funding increased indirect costs by the use of newly negotiated F&A rates was approximately \$1.9 million. Although this is not a significant percentage compared to the \$1.4 billion awarded, the Principal Investigators (PI) at these three institutions, nevertheless, were penalized by the application of the increased F&A cost rates negotiated after initial award, while the PIs at the remaining six campuses were not. Such a \$1.9 million reduction in budgeted grant funds to support direct research costs, agreed upon at the time of initial award, could have resulted in potentially compromising the full achievement of NSF project objectives.

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Further, if OMB lifts its current maximum limitation on the administrative portion of the F&A cost rate, NSF's policy of allowing for the use of subsequent increasing rates for reimbursement of grant costs is likely to result in additional reductions of NSF funds being awarded for supporting PI research. Our trend analysis of F&A cost rates at the top 100 NSF-funded educational institutions disclosed that the rates have remained fairly stable at about the 50-percent level over the past 9-year period; with small variations from year to year and some rates increasing while other rates were decreasing. In part, we believe that the F&A rates have generally stabilized because OMB Circular A-21 established a maximum limit of 26 percent on the administrative portion of the indirect cost rate in October 1991. As a result, any increase in the negotiated F&A rate is limited to the facilities portion used for funding university fixed and capital assets such as buildings and major equipment purchases. Although we have no direct knowledge that OMB intends to eliminate the maximum 26 percent rate for administrative indirect costs, if this were to occur, we believe that the F&A rates at educational institutions would increase to a greater degree. This is supported by the fact that average F&A cost rates at educational institutions increased from 20 percent to almost 54 percent during the period 1964 to 1990, prior to OMB instituting the 26 percent limitation.

Specifically, our trend analysis of F&A rates for the 9-year period from fiscal years 1997 to 2005 disclosed that for 94<sup>3</sup> of the top 100 NSF funded universities with predetermined F&A rates; 50 universities had generally increasing rates, 32 institutions had generally decreasing rates, and the remaining 12 universities had no change in their rates. The average increase in the F&A cost rates for the 50 universities was 2.53 percent and the average decrease for the 32 universities was 2.58 percent. The total NSF funding over the 9-year period awarded to the universities with increasing rates was \$11.6 billion, whereas, the universities with decreasing rates received \$7.9 billion. Consequently, on a proportional basis, there were a greater number of universities and a larger amount of NSF funds awarded to institutions with increasing indirect cost rates than decreasing rates.

<sup>&</sup>lt;sup>3</sup> Of the top 100 NSF-funded universities, 94 had predetermined F&A rates and the remaining 6 did not. The GPM option only applies to predetermined F&A rates.

## **Conclusion**

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NSF needs to revise its GPM procedures for claiming indirect costs on NSF grants to be consistent with OMB Circular A-21 requirements. When OMB revised Circular A-21 in May 1996 to require the use of the negotiated F&A cost rate in effect at the time of initial award throughout the life of a sponsored agreement, it clearly stated that the subject GPM procedures allowing different rates for "funding and reimbursement" of indirect costs did not comply with the new A-21 requirement. Therefore, NSF needs to change its GPM procedures to both provide consistent Federal grant policies and to minimize confusion at universities as to what F&A cost rate to apply. Also, changing its policy would ensure limited NSF research funding is judiciously managed to achieve the maximum level of scientific program results.

## Recommendation

We recommend that the Director, Division of Institution and Award Support (DIAS) revise paragraph 633.1b.2.of NSF's <u>Grant Policy Manual</u> to require educational institutions to use the negotiated F&A rates in effect at the time of the award throughout the life of the sponsored project as required by provision G.7 of OMB Circular A-21. Issue a notification to all NSF awardees on the subject change until such time the GPM is officially revised.

## NSF Response

While NSF did not provide written comments to the draft audit report, senior management officials orally agreed with the finding and recommendation. Officials stated that paragraph 633.1b.2. of the <u>Grant Policy Manual</u> will be appropriately revised during its next planned update, which is tentatively scheduled within the next six months.

### OIG Comments

NSF's proposed corrective action is appropriate. To help ensure timely implementation of the recommendation as required by Office of Management and Budget Circular A-50, <u>Audit Followup</u>, please provide us a copy of the applicable portion of the <u>Grant Policy Manual</u> when the revision is made. If such action is not completed by January 12, 2007, we ask that NSF provide us an update with a revised milestone date.

# Appendix A

# Federal Register Announcement on OMB Circular A-21 Revisions on F&A Rates

The following is an excerpt from <u>Federal Register</u> (Vol. 61, No. 90 / May 8, 1996) announcing the "Final Revision and Recompilation of OMB Circular A-21." OMB received about 200 comments from colleges and universities, Federal agencies, professional organizations, and accounting firms on the proposed Circular A-21 changes. [Page 20884] provides the OMB responses to six specific comments on the newly proposed section G.7, *Fixed Rates*. The following 5 of the 6 comments and responses are relevant to NSF; with the last comment and response specifically addressing NSF's GPM provision for indirect costs:

## Fixed Rates (Section G.7)

### Comment:

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Clarification of ``life of agreement'' is needed since a project can extend over a long period of time exceeding ten or fifteen years at times. Does it mean each continuing period of an award or each competing renewal of an award? Fixed rates should only apply prospectively to new awards. ``Life'' should mean each competitive renewal period. A commenter suggested that a fixed rate apply for a period of three years.

## Response:

OMB has clarified ``life of agreement'' to mean each new competitive segment. A competitive segment is a period of years approved for a project at the time of the award, usually three to five years. Fixed rates will apply only to awards made after the publication date of this revision.

### Comment:

A clarification is needed for the impact of a fixed rate throughout the life of the award on the various types of rates, i.e., provisional, predetermined and fixed rates.

### Response:

The revision requires that the Federal funding agencies use rates in effect at time of award throughout the life of the award, using the negotiated rates (predetermined, fixed or provisional) at the time of the award. For example, if an educational institution has a provisional rate of 40 percent at the time of the award, the 40 percent rate will be used for funding and reimbursement throughout the life of that award. If an educational institution has predetermined rates of 40 percent (first year), 42 percent (second year) and 45 percent (third year), then a five-year project would have rates of 40 percent (first year), 42 percent (second year) and 45 percent (third, fourth and fifth years). When an educational institution does not have a negotiated rate with the Federal Government at the time of the award (because the educational institution is a new grantee or the parties cannot reach agreement on a rate), the provisional rate used at the time of the award will be adjusted after a rate is negotiated and approved by the cognizant agency.

#### Comment:

To implement a fixed rate throughout the life of an award penalizes a university with growth in facility costs. This would discourage colleges and universities from investing in facility costs.

### Response:

When entering into an agreement with educational institutions to perform a specific project, it is only fair for the Federal Government to commit funding and reimbursement based on the conditions as they are understood to exist at that time. Most research project activities remain in the same laboratory during the entire life of the project and, therefore, the facility costs should remain at the same level. A fixed rate throughout the life of an award would only adversely affect an educational institution when, after the award date, the educational institution moved the project into a more modern and expensive facility. Therefore, for future awards, an educational institution with growth in facility costs should seek to establish future cost rates (fixed or predetermined) that reflect the growing cost pattern.

#### Comment:

It is not clear what rate is to be used when the educational institution's rate is decreasing during the life of the award.

#### Response:

In the case of anticipated declining cost rates, the educational institution should provide the basis for the anticipated decline. Total funding for the award would reflect the anticipated decline. If a declining cost rate is not anticipated at the time of award, the educational institution may recover the costs at the rates in effect at the time of the award.

#### Comment:

Fixed rates should only be used for funding a total project, regardless of Federal reimbursement of a university's F&A costs. This policy is consistent with the funding and reimbursement policies for grants by the National Science Foundation (NSF).

### Response:

Current NSF policies award a fixed amount (direct and F&A costs) for the conduct of an entire project. This policy allows the educational institution to recover more F&A costs than originally budgeted as long as the total reimbursement for the project does not exceed the funding for the total award. The revision in Section G.7 provides that a fixed rate shall be used for both funding and reimbursement of F&A costs during an award's life (or a competitive segment's life). This policy assures that the Federal Government is receiving the level of services (i.e., research) agreed to by the educational institution and the Federal agency when the award was made. If the fixed rate concept is used only for funding of the award and not reimbursement of F&A costs, during periods of increasing rates, while the total funding for the award remains the same, then a shift of funding available for direct costs to F&A costs would occur. Therefore, the funding available for direct cost activities would decrease and so would the level of services (or research).