U.S. DEPARTMENT OF ENERGY

OFFICE OF INSPECTOR GENERAL

REPORT ON INSPECTION OF

LOS ALAMOS NATIONAL LABORATORY'S

SYSTEM FOR CONTROLLING COST OVERRUNS

ON WORK-FOR-OTHERS PROJECTS

The Office of Inspections wants to make the distribution of its inspection reports as customer friendly and cost effective as possible. Therefore, we are making this report available electronically through the Internet at the following alternative addresses:

Department of Energy Headquarters Gopher gopher.hr.doe.gov

Department of Energy Headquarters Anonymous FTP vml.hqadmin.doe.gov

We are experimenting with various options to facilitate inspection report distrubution. Your comments would be appreciated and can be provided on the Customer Comment Form attached to the Inspection Report.

Report No.: DOE/IG-0369 Office of Inspections
Date Issued: March 22, 1995 Washington, DC 20585

REPORT ON INSPECTION OF
LOS ALAMOS NATIONAL LABORATORY'S
SYSTEM FOR CONTROLLING COST OVERRUNS
ON WORK-FOR-OTHERS PROJECTS

TABLE OF CONTENTS

I.	INTRODUCTION AND PURPOSE	1
II.	SCOPE AND METHODOLOGY	2
III.	SUMMARY RESULTS OF INSPECTION	2
IV.	BACKGROUND	5
V.	RESULTS OF INSPECTION	8
	AL'S IMPLEMENTATION OF WFO COST MONITORING AND CONTROL PROCEDURES	8
	LANL'S MANAGEMENT SYSTEM FOR CONTROLLING COST OVERRUNS ON WFO PROJECTS	14
	PARTIAL FINANCING OF A LANL WFO PROJECT DURING FISCAL YEAR 1992#=1	24

U.S. DEPARTMENT OF ENERGY
OFFICE OF INSPECTOR GENERAL
OFFICE OF INSPECTIONS
WASHINGTON, DC 20585

REPORT ON INSPECTION OF
LOS ALAMOS NATIONAL LABORATORY'S
SYSTEM FOR CONTROLLING COST OVERRUNS
ON WORK-FOR-OTHERS PROJECTS

I. INTRODUCTION AND PURPOSE

The Department of Energy's (DOE) Office of Inspector General issued Report No. DOE/IG-0335, "Report on Inspection of Selected Intelligence and Special Access Program Work-for-Others Projects," on October 8, 1993. In the report, we noted that Los Alamos National Laboratory (LANL) had areas where internal controls involving work-for-others (WFO) projects were not evident or were not working as intended. For example, LANL management told us that, should the costs of a WFO project exceed funding available from the customer, the cost overrun amount would be charged to an overhead account, and later be inappropriately recharged by cost corrections to other projects.

The purpose of this inspection was to review LANL's systems for controlling cost overruns on, and ensuring financial integrity of, WFO projects. We also reviewed Albuquerque Operations Office's (AL) implementation of internal processes for monitoring costs and ensuring financial integrity for LANL's WFO projects.

The objectives of this inspection were to:

- o Determine the effectiveness of LANL's management system for controlling cost overruns on WFO projects.
- o Determine if LANL has developed and implemented a management system that will ensure the funding integrity of WFO projects, in accordance with applicable DOE orders and Article III, CL.4, of Contract No. W-7405-ENG-36.
- o Determine the extent of AL's contract administration activities regarding these management systems.

II. SCOPE AND METHODOLOGY

LANL, in accordance with AL guidance, is to report monthly on WFO projects' cost overruns (LANL uses the term "undistributed costs"). The scope of our inspection included all WFO projects reported by LANL as having cost

overruns during Fiscal Years (FY) 1992 and 1993. From this universe, we focused on selected WFO projects that had cost overruns for two or more consecutive months.

Because of the sensitive nature of some WFO projects, this report does not identify specific customer agencies associated with the reviewed projects. Instead, we refer to the projects by the program code assigned by LANL.

In conducting the inspection, we interviewed officials and obtained information during visits to the Albuquerque Operations Office and the Los Alamos National Laboratory. We reviewed LANL's management systems for controlling cost overruns on, and ensuring funding integrity of, WFO projects. We also performed a detailed review of applicable financial transactions for the selected WFO projects.

Additionally, we reviewed the extent of AL's contract administration activities in monitoring costs and ensuring financial integrity for LANL's WFO projects. We also examined specific information used by AL in conducting these activities.

This inspection was conducted in accordance with Quality Standards for Inspections issued by the President's Council on Integrity and Efficiency.

III. SUMMARY RESULTS OF INSPECTION

The following is a brief summary of the findings included in this inspection:

o We found that AL was not enforcing provisions of a special contract clause which allows LANL, in certain situations, to incur cost overruns on WFO projects. In the event that work on a WFO project is intended to be continuous but funding authorization are not provided to LANL on a timely basis, DOE can authorize the University to continue work on the project at the University's expense with the University's money. Since AL was not enforcing the provision that the University use its own funds, DOE inappropriately funded the expenses incurred by LANL for WFO cost

We also noted, and AL-Financial Management Division (FMD) officials confirmed, that LANL was not being required to fully comply with the WFO cost reporting requirements specified in a November 30, 1992, memorandum to contractors under the cognizance of AL. As a result, AL-FMD was generally not provided adequate information regarding the causes of, or corrective actions for, WFO cost overruns.

In our opinion, AL-FMD had only partially implemented

cost monitoring and control procedures relative to LANL's WFO projects, including actions to ensure the timely settlement of applicable cost overruns. We believe AL-FMD officials should review LANL's WFO cost overruns incurred after October 1, 1992, and recover from the University of California the amounts of any cost overruns not already properly settled.

o During our review of selected WFO projects at LANL, we identified WFO cost overruns of \$104,918 in FY 1992 and \$133,533 in FY 1993. These cost overruns, contrary to DOE Order 2200.6A, were then inappropriately recharged by invalid cost corrections to DOE program accounts and/or other WFO customers.

We further noted that other selected WFO cost overruns reported by the Laboratory had been properly recharged, but without adequate written documentation, to DOE program accounts and/or other WFO customers. We also found that LANL personnel did not always follow selected procedures in LANL's Financial Management Handbook, and that these procedures did not require LANL technical and financial personnel to maintain adequate supporting documentation for cost corrections.

Based on these examples, it is our opinion LANL's management systems for controlling cost overruns on WFO projects, which were in use during both Fiscal Years 1992 and 1993, reflected an absence, or lack of implementation, of selected management controls. We believe that necessary management controls, properly implemented, would enhance the systems' effectiveness.

o Laboratory Directed Research and Development (LDRD) is a DOE sponsored program which provides multiprogram laboratories an opportunity to fund new and highly innovative research activities with revenues collected through the program. Due to an overcollection of FY 1992 LDRD revenues, LANL rebated \$3,500,000 to selected LANL accounts and projects.

We found, for the FY 1992 LDRD rebate, that LANL had rebated \$288,812, the entire amount for a category of WFO projects, to one WFO project within this category. We calculated that, if the rebate was prorated to all WFO projects in the category, the project should have only received a rebate of approximately \$46,000. Therefore, other WFO customers' projects within this category were inappropriately charged approximately \$243,000, while the one WFO project's funds were improperly supplemented by the same amount.

LANL management actions were not in accordance with guidance in the then DOE Order 2200.6. While LANL may not be able to go back and correct the FY 1992 LDRD rebate, we believe that future rebates for LDRD

overcollections should be refunded, in proportionate shares, to all WFO customers in the same manner in which LDRD funds were collected.

The Director, AL-Financial Management Division, provided comments on the report's findings and recommendations. The Director concurred with our recommendations and provided additional comments on actions that have been, or will be, taken by AL and LANL.

The Director also stated that LANL had, in FY 1994, instituted more stringent cost monitoring and control procedures for the WFO program. LANL's WFO analysts now routinely close all WFO projects to charges when the projects are 90 percent costed and committed. (LANL previously closed all WFO projects which were 95 percent costed and committed.) The analysts review the status of these projects at least twice weekly and coordinate with divisional financial analysts to assure that additional work "reflects" the projects' remaining funds. The Director stated that this control has reduced WFO cost overruns considerably.

The Director further stated that LANL will bring a new time and effort system on line in FY 1996. The system will record full time equivalent labor costs weekly; the system currently in use only records these costs at month-end. The Director expects further reductions in the number of WFO cost overruns once the new time and effort system is operational.

The results of the inspection are discussed in more detail in Section $\ensuremath{\mathtt{V}}\xspace.$

IV. BACKGROUND

The Department of Energy performs work-for-other Federal agencies either directly or through DOE's management and operating (M&O) contractors. In this manner, other Federal agencies can take advantage of DOE's vast and unique research capabilities. DOE also benefits through better and more continuous use of its facilities and personnel.

Most WFO work within DOE is authorized under the Economy Act of 1932. The Act allows an agency to place an order for goods and services from another agency.

DOE and AL WFO Guidance

DOE Order 4300.2B, "Non-Department of Energy Funded Work (Work-for-Others)," dated July 16, 1991, established DOE policy, procedures, and responsibilities for review, acceptance, and monitoring of non-DOE funded work performed under DOE contracts.

AL issued an implementing order, AL Order 4300.2B, on

September 16, 1992. This supplemental directive does not change any requirements contained in DOE Order 4300.2B, but does contain administrative and contractual guidance.

DOE Order 2200.6A, "Financial Accounting," Chapter IX, Reimbursable Work, Revenues, and Other Collections, dated January 7, 1993, and its predecessor, established DOE policy and general procedures for accounting for reimbursable work, one category of which is WFO. DOE's policy is to accept reimbursable agreements for its goods and services and to perform work-for-others on a reimbursable basis, provided legal and regulatory authority to perform the reimbursable work exists and the Department is capable of complying with the requirements of the legal authorities relied on. Furthermore, work-for-others must not impede the primary functions and responsibilities of the performing activity, and budgetary resources for performing reimbursable work must be available from the customer.

AL issued a memorandum on "Cost Overruns on Non-DOE Funded Work" to all integrated contractors under its cognizance, including LANL, on November 30, 1992. The memorandum presented AL's policy guidance on cost overruns for non-DOE funded work and was to be effective upon receipt by the respective contractors.

AL-FMD subsequently issued an internal procedure (Document P0050R00), entitled "Monitoring and Controlling the Costs of Non-DOE Funded Work," on April 2, 1993. This internal procedure was updated and reissued as Document P0050R01 on November 15, 1993. The purpose of this procedure was to ensure (1) that non-DOE funded work is not performed in advance of receiving budgetary resources, (2) that costs incurred against individual work orders do not exceed the budgetary resources authorized, and (3) that integrated contractor cost overruns recorded on AL's books are accurately recorded and promptly collected from the contractor's parent organization.

Contractual Guidance

The University of California operates DOE's Los Alamos National Laboratory under Contract No. W-7405-ENG-36. The contract was substantially modified (Modification No. M359), with an effective date of October 1, 1992. Prior to Modification No. M359, the contract's work-for-others clause, CLAUSE 66 D USE OF DOE FACILITIES FOR NON-DOE FUNDED WORK, stated that the University could perform work-for-other Federal agencies provided the work was related to the mission of the contract, was approved in advance by the Contracting Officer, and was performed consistent with the terms of the contract and other applicable DOE rules and regulations.

We did not identify a contract clause, prior to October 1 1992, that specifically required LANL to have a

system of management controls. However, CLAUSE 11-ACCOUNTING AND FINANCIAL RECORDS, Paragraph (h), Internal Audit, did require LANL to perform an internal audit program consistent with the guidelines contained in the Institute of Internal Auditors publication "Standards for the Professional Practice of Internal Auditing," (Standards). Part 300 of the Standards, Scope of Work, states "the scope of the internal audit [work] should encompass the examination and evaluation of the adequacy and effectiveness of the organization's system of internal control (emphasis added)"

Modification No. M359, Contract No. W-7405-ENG-36, replaced the previous WFO clause with Article III, CL.4-WORK-FOR-OTHERS (SPECIAL). This clause specifies that the University may perform non-DOE funded work-for-others, including other Federal agencies, using DOE facilities and resources and LANL employees. The work must be: (1) related to the mission of the contract or within any special capabilities of LANL, (2) accepted by the University and funded by the customer agency or sponsor in accordance with University policies and procedures approved by the Contracting Officer, and (3) performed consistent with the terms of the contract.

Article III, CL.4(b) provides guidance in the event that a WFO project is intended to be continuous, but funding authorizations are not provided to LANL on a timely basis. DOE authorizes the University to continue work at the University's expense with the University's money. In effect, this clause allows LANL, in certain situations, to incur cost overruns on WFO projects which would otherwise be prohibited by DOE Order 2200.6A. However, LANL can only incur cost overruns at the University's risk. If the customer agency does not subsequently provide funding to cover the cost overruns, the University should absorb them.

Modification No. M359 also added the following clause, ARTICLE VII, CL.18 - MANAGEMENT CONTROLS (JAN 1992)* DEAR 970.5204-20. This clause states, in part, "The University shall be responsible for maintaining, as an integral part of its organization, effective systems of management controls . . . to reasonably ensure that . . . all collections accruing to the University in connection with work under this contract, expenditures, and all other transactions and assets are properly recorded, managed and reported; and financial, statistical, and other reports necessary to maintain accountability and managerial control are accurate, reliable, and timely."

V. RESULTS OF INSPECTION

AL'S IMPLEMENTATION OF WFO COST MONITORING AND CONTROL PROCEDURES

We found that AL-FMD's contract administration activities

were not adequate since the division had only partially implemented internal cost monitoring and control procedures relative to LANL's WFO projects. Further, AL-FMD was not requiring LANL to fully comply with the cost reporting requirements specified in a November 30, 1992, memorandum to contractors under the cognizance of AL.

For example, we found that AL was not enforcing provisions of a special contract clause which allows LANL, under certain circumstances, to incur cost overruns on WFO projects. Under this provision, LANL may not charge to a DOE budgetary resource costs incurred for non-DOE funded work which exceed obligational authority. Therefore, the University, not DOE, should be at risk if additional customer funding is not subsequently provided.

AL's Guidance on Cost Overruns

AL's Assistant Manager for Management and Administration issued a memorandum entitled "Cost Overruns on Non-DOE Funded Work" to its M&O contractors, including LANL, on November 30, 1992. In the memorandum, AL reemphasized that contractors under the cognizance of AL should provide effective internal controls to ensure that costs of non-DOE funded work were absolutely limited to the available funding resource and that no work was performed on non-DOE projects in advance of DOE authorizing the work. The memorandum further directed the contractors to ensure that all costs of non-DOE funded work were clearly distinguished from those of DOE programs. This guidance was consistent with that contained in the then DOE Order 2200.6, Chapter IX.

AL also stated that, in the unlikely event of non-compliance with the above policies, the contractor should:

- "- Record all costs for non-DOE funded work which are in excess of obligational authority for that work as accounts receivable from the contractor's parent organization in the month incurred in accordance with the attached guidance. Contractor has 60 days to perform an administrative review, after which time, the contracting officer shall provide direction on the disposition of the receivable. Such costs shall not be transferred to AL; and
- "- Report all costs by individual work order for non-DOE funded work which exceed obligational authority in a given month to the Director, FMD, AL, as soon as determinable, but no later than ten working days following the last day of the month in which the costs were incurred. For each incident reported, identify the DOE approved funding source and include a statement as to the cause of the overrun and

the planned corrective action. A negative report is required."

AL's Internal Cost Monitoring and Control Procedures

Consistent with DOE Order 2200.13, "Oversight of Integrated Contractor Financial Management," AL-FMD issued an internal procedure, "Monitoring and Controlling the Costs of Non-DOE Funded Work," Document Number P005OR00, on April 2, 1993. This procedure was amended by Document Number P005OR01, dated November 15, 1993.

This internal procedure stated that, as part of FMD cost monitoring, AL's Chief, Reimbursement and Travel Section, should "Electronically (via All-In-1) notify the Chief, Financial Oversight and Analysis Branch, of all cost overruns remaining in BSC [Balance Sheet Code] 1419 for sixty days by identifying the order number, the amount of the overrun and the date originally reported."

The procedure further stated that, as part of providing FMD cost control, AL's Chief, Financial Oversight and Analysis Branch, should "Prepare and issue a memorandum (Attachment 1) to the cognizant administrative contracting officer for the M&O/integrated contractor, directing disposition of the delinquent account receivable within two weeks after notification by the FMD Fiscal Operations Branch, Reimbursements and Travel Section."

Lack of AL-FMD Action on WFO Cost Overruns

Per the previously cited November 30, 1992, memorandum, LANL is to report, to the AL-FMD Director, all costs by individual work order for non-DOE funded work (including WFO projects) which exceeds obligational authority in a given month. To accomplish this requirement, LANL uses the "List of Program Codes with Undistributed Costs," which reports those "undistributed costs" that exceed funding provided by WFO and other customers.

In accordance with this memorandum, LANL has 60 days to perform an administrative review to determine if the "undistributed costs" are valid charges against the WFO project (i.e., a cost overrun) or invalid charges which should be recharged to another program code(s). If the "undistributed costs" are not resolved within the 60 day timeframe and remain in accounts receivable (contractor's BSC 1419), the administrative contracting offices are to provide direction on the disposition of the receivables.

Article III, CL.4(b), Contract No. 7405-ENG-36, Modification No. M359, provides guidance in the event that work on a WFO project is intended to be continuous, but funding authorizations are not provided to LANL on a timely basis. DOE authorizes the University to continue work at the University's expense with the University's money. In effect, this clause allows LANL, in certain situations, to

incur cost overruns on WFO projects, but at the University's own risk. If the customer agency does not subsequently provide funding to cover the cost overruns, the University should absorb these overruns.

The administrative contracting officer, in order to dispose of cost overruns remaining in accounts receivable beyond 60 days, should, therefore, direct LANL to dispose of the cost overruns by either obtaining reimbursement from the University or offsetting a future payment to the University. AL has taken the position that LANL should settle these cost overruns within two weeks of the contractor being notified by the administrative contracting officer.

During our review of FY 1993 "undistributed cost" lists submitted by LANL, we noted that WFO Program Code R51A (Funding Document DTFA03-83-A-00321) reported a cost overrun for four consecutive months as follows:

April	May	June	July
\$71,027.12	\$68,748.31	\$172 , 785.03	\$6,113.78

We confirmed that AL's Chief, Reimbursements and Travel Section, had not provided appropriate notification of these cost overruns as prescribed by Document Number P0050R01. The Chief, Financial Oversight and Analysis Branch, therefore, did not have information needed to prepare and issue appropriate disposition information to the cognizant administrative contracting officer. Lack of management action was the only explanation provided by AL-FMD officials for not implementing applicable internal cost monitoring and control procedures.

As a result, WFO Program Code R51A cost overruns were not disposed of in a timely manner. DOE, rather than the University, bore the expense of the cost overruns not properly settled.

LANL Not Required to Fully Comply With AL-FMD Guidance

The previously cited November 30, 1992, memorandum required LANL to report, by individual work order (i.e., program code), all costs for non-DOE funded work (including WFO) which exceeded obligational authority in a given month. LANL did not start submitting these monthly reports until March 17, 1993, which reported "undistributed costs" for February 1993.

Another requirement of the November 30, 1992, memorandum was that LANL, for each incident reported, should include a statement as to the cause of the overrun and the planned corrective action. Generally, LANL reported "cost validation in process" to satisfy this requirement.

After being reported on the listing for one or two months,

program codes with "undistributed costs" would normally not be reported on the next month's listing. Subsequent listings did not contain any mention of corrective actions or further explanations as to the causes for "undistributed costs."

AL-FMD officials stated that LANL's reporting of program codes with "undistributed costs" did not fully comply with the guidance issued on November 30, 1992. These officials further stated that they did not know what the term "cost validation in process" meant. Thus, AL-FMD management was generally not provided with any meaningful information relative to the causes of, or corrective actions for, "undistributed costs." The officials could not recall ever directing LANL to comply more fully with AL requirements or

asking for more information than was provided on the listings.

The AL-FMD officials further stated that, to their knowledge, LANL had not reported any actual WFO cost overruns during FY 1993. As discussed elsewhere in this report, we confirmed WFO cost overruns during FY 1993.

Without adequate reporting by LANL, and without performing a detailed review of WFO costs, AL-FMD did not have sufficient information to properly monitor LANL's WFO cost overruns. Again, lack of management action was the only explanation provided by AL-FMD officials for not ensuring that LANL complied with specified reporting requirements.

Conclusion

We found that AL was not enforcing provisions of a special contract clause which allows LANL, in certain situations, to incur cost overruns on WFO projects. In the event that work on a WFO project is intended to be continuous but funding authorizations are not provided to LANL on a timely basis, DOE can authorize the University to continue work on the project at the University's expense with the University's money. Since AL was not enforcing the provision that the University use its own funds, DOE inappropriately funded the expenses incurred by LANL for WFO cost overruns.

We also noted, and AL-Financial Management Division (FMD) officials confirmed, that LANL was not being required to fully comply with the WFO cost reporting requirements specified in a November 30, 1992, memorandum to contractors under the cognizance of AL. As a result, AL-FMD was generally not provided adequate information relative to the causes of, or corrective actions for, WFO cost overruns.

In our opinion, AL-FMD had only partially implemented cost monitoring and control procedures relative to LANL's WFO projects, including actions to ensure the timely settlement of applicable cost overruns. We believe AL-FMD officials

should review LANL's WFO cost overruns incurred after October 1, 1992, and recover from the University of California the amounts of any cost overruns not already properly settled.

Recommendations

We recommend that the Manager, Albuquerque Operations Office:

- 1. Direct AL-FMD officials to fully implement cost monitoring and control procedures relative to LANL's WFO projects, including actions to ensure the timely settlement of applicable cost overruns in the future.
- 2. Direct AL-FMD officials to review LANL's "undistributed costs" reported since Article III, CL.4 was added to Contract No. W-7405-ENG-36, and recover from the University of California the amounts of any cost overruns, including those related to Program Code R51A, not already properly settled.
- 3. Direct LANL to fully comply with AL's November 30, 1992, guidance on reporting WFO costs which exceed obligational authority in a given month.

The AL-FMD Director concurred with Recommendations 1 through 3. The Director stated that several corrective actions are being taken, or have been taken, since the inspection was conducted. These actions are provided below.

Recommendation 1. "The current procedures on WFO cost overruns will be modified by January 1, 1995, to require the team leader of the Reimbursement and Travel Team to certify to the Director, Financial Management Division (FMD) through the Chief, Fiscal Operations Branch, that applicable cost overruns are settled in a timely manner."

Recommendation 2. "The FMD review process for monitoring and controlling WFO cost overruns was fully implemented as of the February 1994 reporting period. However, a review of LANL's undistributed costs reports since Article III, CL. 4 was added to the University of California contract will be performed to ensure timely settlement of applicable cost overruns prior to February 1994. The review is scheduled to be completed by January 1, 1995."

Recommendation 3. "AL will issue a directive to LANL by January 1, 1995, to fully implement the requirements of the November 30, 1992, guidance on reporting WFO cost overruns. Since the OIG review, LANL has taken steps to strengthen the internal controls for the WFO programs."

LANL'S MANAGEMENT SYSTEM FOR CONTROLLING COST OVERRUNS ON WFO PROJECTS

We concluded LANL's management system for controlling cost overruns on WFO projects could be more effective. The system in use during Fiscal Years 1992 and 1993 reflected an absence, or lack of implementation, of selected management controls.

DOE Order 2200.6A states that no reimbursable work shall continue and no costs shall be incurred beyond the amount of funding provided in the reimbursable agreement and attendant modifications. Further, DOE shall not finance reimbursable work from its own appropriations or another customer's funds but only from the appropriation accounts of the ordering Federal agency.

As a result of LANL's control deficiencies and contrary to the guidance in DOE Order 2200.6A, we identified WFO cost overruns of \$104,918 in FY 1992 and \$133,533 in FY 1993. These cost overruns were inappropriately recharged to DOE program accounts and/or other WFO customers.

We noted that other selected WFO cost overruns reported by the Laboratory had been ultimately recharged, without adequate written documentation, to DOE program accounts and/or other WFO customers. We also found that LANL personnel did not always follow selected procedures in LANL's Financial Management Handbook, and that these procedures did not require LANL technical and financial personnel to maintain adequate supporting documentation for cost corrections.

A discussion of WFO projects with cost overruns and/or management control deficiencies follows.

WFO Program Code R93P Cost Overruns in FY 1992

A WFO project identified as Program Code R93P was reported for two consecutive months (June - July 1992) on LANL's "undistributed cost" reports sent to AL. This reimbursable WFO project, titled "Reactive Armor Explosives System," was managed by LANL's "M" Division, where most of the work was also performed. According to LANL officials, the project was not funded again until May 1993. During our review, we identified \$104,918 in FY 1992 cost overruns as described below. The cost overruns included \$42,764 of equipment costs and \$62,154 of labor charges.

Transfer of WFO Program Code R93P Equipment Costs

During May and June 1992, LANL issued five equipment purchase orders for WFO Program Code R93P as follows:

Purchase Order No.	Estimated Cost
1-KB2-1937F-1	\$ 4,300
5-KH2-1955F-1	5 , 500
2-CS2-2068E-1	12,000
2-CS2-2069E-1	13,500

Total \$39,975 MMMMMMMM

All five purchase orders referenced Program Code R93P as the project providing funding for the equipment. The resulting equipment purchases, with associated burdens, totaled \$42,764.

LANL issued a cost correction memorandum, dated July 30, 1992, to move these equipment costs from WFO Program Code R93P to DOE-funded Program Codes CG26 and CA11. The cost correction memorandum stated that, because of reporting errors, the purchase orders needed to be recoded. Consequently, \$29,757 was recoded to Program Code CG26 and \$13,007 was recoded to Program Code CA11.

LANL officials told us these equipment costs were transferred from WFO Program Code R93P because the project was "overspent," (i.e., costs exceeded available funding.) These costs were transferred to Program Codes CG26 and CA11 because those projects were similar in nature. Thus, the \$42,764 were cost overruns which should have been reported as such by LANL.

 $$\operatorname{Transfer}$ of WFO Program Code R93P Labor Charges in July 1992

During the months of April, May, and June 1992, the Chemical Laser Sciences Division charged a total of 2.10 full-time equivalents (FTEs), with associated labor charges and burden costs, to Cost Center 7905, WFO Program Code R93P. A Chemical Laser Sciences Division financial analyst subsequently issued a cost correction memorandum on July 22, 1992. The memorandum "corrected" the 2.10 FTEs charged to Cost Center 7905, WFO Program Code R93P, during April, May, and June 1992. These labor charges and related burden costs, totaling \$44,357, were recharged to Program Code CE61, a DOE-funded program code.

The cost correction memorandum stated that an incorrect program code was used on Cost Center 7905 and should be corrected. However, LANL program officials told us the \$44,357 in labor charges, and related burden costs, were transferred because WFO Program Code R93P was overspent.

A review of the FY 1992 Program History List by Month for WFO Program Code R93P showed that funds for the project were depleted in June 1992. Additional funding was not received during the remainder of FY 1992. Therefore, the labor charges and related burden costs, totaling \$44,357, were cost overruns which should have been reported as such by LANL.

During May and June 1992, "M" Division charged 3.19 and 3.77 FTEs, respectively, with associated labor and burden costs, to Cost Center 9107, WFO Program Code R93P. An "M" Division financial analyst issued a cost correction memorandum on September 18, 1992. The memorandum "corrected" .37 May FTEs and 1.65 June FTEs of the total FTEs charged to Cost Center 9107, WFO Program Code R93P. These labor charges and related burden costs, totaling \$17,797, were recharged to Program Code CA13, a DOE-funded program code.

The cost correction memorandum stated, because of reporting errors, the FTEs needed to be recoded from Cost Center 9107, Program Code R93P to Cost Center 9107, Program Code CA13. However, LANL program officials informed us that the FTEs, on which the cost correction was based, were transferred because WFO Program Code R93P was overspent.

As previously stated, the FY 1992 Program History List by Month for WFO Program Code R93P showed that the WFO project's funds were depleted in June 1992. The project did not receive additional funding during the remainder of

FY 1992. Again, the labor charges and related burden costs, totaling \$17,797, were cost overruns which should have been reported as such by LANL.

WFO Program Code R51A Cost Overruns in FY 1993

A WFO project identified as Program Code R51A was reported for four consecutive months (April - July 1993) on LANL's "undistributed cost" reports submitted to AL. Program Code R51A was a reimbursable WFO project titled "Explosives Detection System." The overall management responsibility was through LANL's International Technologies Division, with most of the work being performed by LANL's "N" Division. During our review, we identified \$133,533 in FY 1993 cost overruns as described below. The cost overruns included \$108,530 of equipment costs and \$25,003 of labor charges. (An additional finding dealing with WFO Program Code R51A is discussed later in this report.)

Transfer of WFO Program Code R51A Equipment Costs

LANL Purchase Order 4-L62-X1117-2 was issued on March 27, 1992, for upgrades to equipment being used on WFO Program Code R51A. LANL prepared a sole source justification for these upgrades which stated funding had been approved by the sponsoring customer agency for FY 1992, under Cost Center 9702, Program R51A.

Accordingly, LANL charged Cost Center 9702, Program R51A, with \$108,530 in equipment upgrades during December 1992. The costs of the equipment upgrades consisted of \$98,040 for components and \$10,490 for associated burden charges. On January 27, 1993, LANL issued a cost correction

memorandum to transfer the equipment upgrade charges to Program Code XG97, an "N" Division Group/Division Support Account that was subsequently charged to DOE. The cost correction memorandum stated that the original purchase order was inadvertently charged to Program Code R51A.

In our closeout meeting with LANL officials, however, the R51A Program Coordinator told us that the upgraded equipment was used on WFO Program Code R51A and that the costs for the upgrades were funded by the project's customer agency. Furthermore, the Program Coordinator stated that an error had been made when the costs were moved to Program Code XG97. We did not identify, however, a later cost correction transferring the charges back to WFO Program Code R51A, even though LANL was to review the financial transactions monthly.

The "FY 1993 LANL Program History List by Month for WFO Program Code R51A" showed the project's funds were depleted in December 1992. Additional funding was not received until March 1993. Thus, the \$108,530 were cost overruns which should have been reported as such by LANL.

Transfer of WFO Program Code R51A Labor Charges

Per LANL management officials, "N" Division requested "C" Division to perform computer work for WFO Program Code R51A. A ceiling of \$175,000 was placed on the costs to be incurred by "C" Division for this work.

During April 1993, "C" Division charged 7.43 FTEs, with associated labor and burden costs, to Cost Center 8003, WFO Program Code R51A. An "N" Division financial analyst subsequently issued a LANL Interoffice Memorandum to a "C" Division financial analyst on June 11, 1993. The memorandum stated that, since "C" Division costs charged to "N" Division were \$191,400, the cost ceiling overage of \$16,400 needed to be recoded. The memorandum further stated that WFO Program Code R51A was currently closed because costs were in excess of funds. Based on this memorandum, another "C" Division financial analyst subsequently issued two cost correction memorandums, both dated July 21, 1993.

The first memorandum "corrected" 1.24 FTEs charged to Cost Center 8003, WFO Program Code R51A, during April 1993. These labor charges and related burden costs, totaling \$17,627, were recharged to Cost Center 8003, Program Code X39T. Program Code X39T is an internal cost collection pool whose costs are reallocated as overhead to all internal and external users of LANL's Central Computer Facility.

The second memorandum "corrected" 1.68 FTEs, charged to Cost Center 8069, WFO Program Code R51A, during June 1993. The labor charges and related burden costs, totaling \$7,376, were recharged to Cost Center 8069, Program Code

Both cost correction memorandums stated the entries being corrected were coded erroneously by "C" Division. The memorandums also stated "The detailed effort reports maintained in each cost center have been corrected and will be in agreement with the official financial records after these corrections are processed." However, LANL program officials, as well as financial analysts, told us that the FTEs, on which the cost corrections were based, did benefit WFO Program Code R51A. They also told us the FTEs, and associated costs, were moved to Program Code X39T since "C" Division had exceeded the \$175,000 ceiling. A LANL financial analyst further informed us the effort reports, which account for labor charges, had not been corrected as stated in the memorandums. We noted that the correction of effort reports is a requirement of LANL Financial Management (FM) Handbook, Part FM 4066.

As previously stated, this WFO project had received additional funding in March 1993. A review of the "FY 1993 Program History List by Month for WFO Program Code R51A" showed that the project's funds were again depleted in April 1993. Additional funding was not received until July 1993. Therefore, "C" Division labor charges and related burden costs were recharged on the two cost correction memorandums. These charges, totaling \$25,003, were cost overruns which should have been reported as such by LANL.

Absence, or Lack of Implementation, of Management Controls

Adequate controls are essential in achieving management and program goals and in providing for full accountability over the available resources. Management controls help to achieve the positive aims of management and assist in preventing negative consequences from occurring. Notwithstanding requirements for LANL to have adequate controls, we identified additional examples where management controls either had not been established or properly implemented.

Equipment Costs Transferred Out Of, and Back Into, WFO Program Code R51A

LANL Purchase Order 5-EX3-6472E-1 was issued on January 15, 1993, for equipment to be used on WFO Program Code R51A. The purchase order, which was coded to Cost Center 9702, Program Code R51A, was for \$50,250 in equipment costs and \$5,377 in additional capitalized costs. The total amount of \$55,627 was subsequently charged to WFO Program Code R51A during April 1993. On July 29, 1993, LANL transferred the equipment costs to Program Code Z501, a code used for the fabrication of capital equipment. On September 8, 1993, LANL transferred the equipment costs back to WFO Program Code R51A.

Both cost correction memorandums stated that the purchase

order was incorrectly charged and all year-to-date costs and necessary procurement recharges should be recoded. The "FY 1993 LANL Program History List by Month for WFO Program Code R51A" showed that the project received additional funds in July 1993. These funds were also expended during July 1993; supplemental funding was not received until September 1993. Since the equipment costs were transferred out of, and back into, WFO Program Code R51A, we concluded that LANL had transferred the \$55,627 because the project would have otherwise been in a cost overrun situation for the remainder of FY 1993.

LANL Financial Management Handbook, Part FM 4022, General Ledger Detail, specifies the requirements for cost correction memorandums. Cost corrections, such as those discussed above, can easily occur since Part FM 4022 does not require supporting documentation for the correcting entries.

Multiple Effort Correction

For October through December 1992, LANL charged 6.05 FTEs of effort to Program Code S33B. On February 24, 1993, a LANL financial analyst issued a cost correction memorandum to transfer the 6.05 FTEs to Program Code S33P. The memorandum stated the original entries had been coded erroneously by "C" Division. However, a "C" Division program official informed us that a LANL financial analyst had told "C" Division management that Program Code S33B was not intended to be an active FY 1993 program code, and therefore, the FTEs should be recoded. The program official further stated that the labor charges were moved to Program Code S33P because the codes were similar.

On April 15, 1993, the same LANL financial analyst issued another cost correction memorandum that transferred 9.17 FTEs from Program Code S33P to Program Code R99X, a WFO reimbursable project. WFO Program Code R99X was for a Computer Application Profile Study for a customer agency. The 6.05 FTEs originally charged to Program Code S33B were included in the 9.17 FTEs. Again, the memorandum did not explain why the FTEs were transferred, only that the entry was coded erroneously by "C" Division. When interviewed, a "C" Division program official stated that another "C" Division official, who has since retired, had determined that the FTEs should not have been moved to Program Code S33P. The only plausible explanation given for recoding the effort to WFO Program Code R99X was that "C" Division officials had determined the labor charges were for computer security work.

Another LANL financial analyst issued a June 17, 1993, cost correction memorandum that transferred 9.63 FTEs from WFO Program Code R99X to Program Code X33P. The 6.05 FTEs originally charged to Program Code S33B were again included in the 9.63 FTEs. The memorandum restated the reason given

for making the two cost corrections discussed above. A "C" Division program official told us the WFO Program Code R99X Project Leader had determined that the labor charges did not belong on that project. The program official also stated that "C" Division officials had subsequently determined the FTE labor charges should have originally been charged to Program Code X33P. Program Code X33P was for Mainframe Recharge (Cray) and was distributed to all users of the Cray on a monthly basis.

Per the above discussion, 6.05 FTEs of effort, which had been expended during 1992, were recharged three times over a four month period during 1993. Additionally, none of the effected effort reports were corrected as required by LANL Financial Management Handbook, Part FM 4066, Form B FTE Correction. As previously stated, Part FM 4022 does not require LANL financial analysts or program officials to maintain supporting documentation for cost corrections, including FTE corrections.

Capital Equipment Charged to Program Code XG97

Capital equipment charges and associated burden costs, totaling \$69,619, were charged to WFO Program Code R51A, Expense Code 09, in December 1992. On January 27, 1993, these charges were transferred to Program Code XG97, an "N" Division Group/Division Support Account which is charged to DOE. Accountants in LANL's Property Accounting Section told us that capital equipment should not be charged to certain codes, including "X" program codes. They confirmed the capital equipment costs of \$69,619 had been inappropriately moved from WFO Program Code R51A to Program Code XG97.

Per LANL accountants, procedures require financial transactions to be reviewed monthly to ensure that Expense Code 09 entries are not charged to "X" program codes. However, these reviews often take place before, not after, cost correction entries are recorded.

Improper Use of "Z" Codes

LANL Financial Management Handbook, Part FM 5063, Plant & Capital Equipment "Z" Programs, states that the purpose of a "Z" code is to facilitate the accumulation of costs against job orders covering the fabrication of capital equipment. Part FM 5063 further states that "Z" codes should not be used for any other purpose. During our review, we found that LANL "Z" codes were used for other than intended purposes and were also not being closed on a timely basis.

Purchase Request No. 4-L61-X1117-1, dated May 15, 1991, was for the lease/purchase of a 1.75 MEV RFP Linear Accelerator. An internal memorandum, dated July 22, 1991, proposed a company to finance the lease/purchase at an estimated cost of \$751,585. Both documents

referenced WFO Program Code R51A as the funding source for the accelerator. An August 9, 1991, memorandum, Subject: Purchase Request Recode (L61-X1117-PR), spread the estimated cost to four "Z" program codes. Since the accelerator was being purchased and not fabricated, the cost should not have been recoded to the four "Z" program codes.

For example, the largest portion of the accelerator's cost, \$593,754, was recoded to Program Code Z374. Program Code Z374 was opened on March 25, 1987, and was still shown as an active program code on LANL's Program Codes Listing, dated August 10, 1993. A LANL capital equipment analyst stated that "Z" program codes are normally active for one to three years. Program Code Z374 had been active for more than six years and had been modified numerous times. Additionally, Program Code Z374 had been established to collect costs for the upgrade of an N-2 10 MEV Linear Accelerator. In a closeout meeting with LANL officials, program officials confirmed that the lease/purchase of the 1.75 MEV RFP Linear Accelerator was inconsistent with the intended purpose of Program Code Z374.

Conclusion

During our review of selected WFO projects, we identified WFO cost overruns of \$104,918 in FY 1992 and \$133,533 in FY 1993. These cost overruns, contrary to DOE Order 2200.6A, were then inappropriately recharged by invalid cost corrections to DOE program accounts and/or other WFO customers.

We also noted that other selected WFO cost overruns reported by the Laboratory had been properly recharged, but without adequate written documentation, to DOE program accounts and/or other WFO customers. We further found that LANL personnel did not always follow selected procedures in LANL's Financial Management Handbook, and that these procedures did not require LANL technical and financial personnel to maintain adequate supporting documentation for cost corrections.

We believe that a requirement to maintain supporting documentation would help prevent invalid cost corrections such as the examples cited above. Further, supporting documentation would also enable LANL personnel to explain, at a later date, why valid cost corrections were made in those cases where the individuals involved in authorizing and/or preparing the cost corrections were no longer available.

As discussed in Section IV., BACKGROUND, of this report, LANL can perform work-for-other Federal agencies as long as the work is performed consistent with the terms of Contract No. W-7405-ENG-36 and applicable DOE rules and regulations. Modification No. M359 to this contract, effective October 1, 1992, modified the previous WFO clause and added

a clause, Article VII, CL.18, which specifically requires the University to maintain effective systems of management controls.

DOE, under Article III, CL.4, WORK-FOR-OTHERS (SPECIAL), Part(b), of the contract, has authorized LANL, in some instances, to incur cost overruns on WFO projects. We, therefore, expected management controls over WFO costs to have been strengthened in FY 1993. Based on the above examples, it is our opinion that the management systems in use during both Fiscal Years 1992 and 1993 reflected an absence, or lack of implementation, of selected management controls. We therefore concluded that LANL's management systems for controlling cost overruns on WFO projects could be more effective.

Recommendations

We recommend that the Manager, Albuquerque Operations Office:

- 4. Review WFO Program Code R51A's financial transactions for FY 1993. Obtain reimbursement from the University of California, in accordance with Article III, CL.4, of Contract No. W-7405-ENG-36, for cost overruns verified during your review, including those cost overruns identified in this report.
- 5. Direct LANL to review its management systems for ensuring financial integrity of and controlling cost overruns on WFO projects, and take actions to ensure that necessary management controls are in place and properly implemented.
- 6. Direct LANL to revise the Financial Management Handbook to require that written supporting documentation for cost corrections be developed and retained as appropriate.

The Director, AL-Financial Management Division, concurred with Recommendations 4 through 6, and offered additional comments which are provided below.

Recommendation 4. "A review of [WFO Program Code] R51A's charges will be performed to determine if appropriate settlement are [sic] in accordance with the UC [University of California] contract clause. The review is scheduled to be completed by June 30, 1995."

Recommendation 5. "A directive will be issued to LANL by January 1, 1995. As we have stated earlier, LANL has made continuous progress in strengthening the internal controls for the WFO programs, including WFO cost overruns. A new duty for the Budget Group and WFO coordinator, will be to visit each LANL group working on the WFO projects. During the meeting, the importance of effective management of WFO costs will be thoroughly explained and the cost controls

reiterated. In addition, the WFO Cost Control Program will be presented to the Cost Working Group of the Laboratory Leadership Council for further review and suggestion."

Recommendation 6. "LANL will institute in FY 1996 a revision to the Financial Management Handbook to require that written supporting documentation for cost corrections be developed and retained in the division making the correction. A directive will be issued to LANL by January 1, 1995."

PARTIAL FINANCING OF A LANL WFO PROJECT DURING FISCAL YEAR 1992

We found, for the FY 1992 Laboratory Directed Research and Development rebate, that LANL had rebated \$288,812, the entire amount for a category of WFO projects, to WFO Program Code R51A. We calculated that, if the rebate was prorated to all WFO projects in the category, the project should have only received a rebate of approximately \$46,000. Therefore, other WFO customers' projects within this category were inappropriately charged approximately \$243,000, while R51A's funds were improperly supplemented by the same amount. These actions were contrary to provisions in the then DOE Order 2200.6, Chapter IX, which directed that DOE should not finance reimbursable work from another customer's funds, but only from the appropriation accounts of the ordering Federal agency.

LDRD Background Information

DOE Order 5000.4A, "Laboratory Directed Research and Development," was issued as a replacement to DOE Order 5000.4 on April 9, 1992. The Order establishes the Department's policy and guidelines for providing its multiprogram laboratories with an opportunity to fund new and highly innovative research activities through the LDRD program.

LDRD is basic and applied research and development which focuses on early exploration and exploitation of creative and innovative concepts selected at the discretion of the laboratory director. DOE policy is to permit each multiprogram laboratory to carry out a limited amount of LDRD to enhance the ability of the laboratory to address the future mission objectives of DOE. DOE's purpose is thus accomplished by providing the laboratories with the flexibility to support new science and technology ideas to determine their worth and a mechanism which is a major factor in achieving and maintaining staff excellence.

LANL's FY 1992 LDRD Rebate

The Executive Summary of the FY 1992 Program Plan for LANL's LDRD program requested approval for a budget of \$60,420,000, equivalent to six percent of LANL's estimated budget ceiling for the year. We were told that, nearing the end of this fiscal year, LANL officials determined that

LDRD would be overcollected for FY 1992. On September 30, 1992, LANL rebated \$3,500,000 to selected LANL accounts and projects for this LDRD overcollection.

The FY 1992 LDRD rebate was distributed based on a percentage of each major Budget and Reporting classification's (B&R) salaries and fringes. Seven major B&Rs were funded at LANL in FY 1992, including the B&R category "other WFO." We counted eleven WFO customers in the "other WFO" B&R, as having work done at LANL during the fiscal year.

We were told that LANL management decided to rebate to only one funded WFO project, WFO Program Code R51A, in the "other WFO" B&R. Therefore, WFO Program Code 51A received the entire "other WFO" B&R rebate of \$274,275, plus an additional \$14,537 in division support tax, (i.e., divisional overhead,) for a total rebate of \$288,812. We calculated that the R51A LDRD rebate, including division support tax, should have been approximately \$46,000 if the rebate had been prorated to all "other WFO" customers, in proportionate shares. (Note: The R51A customer agency also had work done under WFO Program Code R95M.)

As stated in previous findings, WFO Program Code R51A had funding problems during the life of the project. The "FY 1992 Program History List by Month for WFO Program Code R51A" showed the project being out of money during the months of June, July, and August 1992. Further, a LANL internal memorandum from a LANL financial analyst to the project program manager, dated August 13, 1992, showed that the project was one hundred percent obligated. Even with the funding supplement generated by the LDRD rebate, our analysis showed that WFO Program Code R51A continued to be in a cost overrun situation throughout much of FY 1993, when the project was terminated by the customer agency.

DOE Guidance Not Followed

The then DOE Order 2200.6, Chapter IX, required WFO project costs to be monitored and directed that other customer funds should not be used for another WFO project.

Paragraph 2.d.12 stated "Funds provided under reimbursable agreements are to be used solely for the intended purposes and in accordance with the legal and other limitations imposed on the use of funds as specified in the agreements." Further, Paragraph 2.i.(1)(e) stated that "DOE shall not finance reimbursable work from its own appropriations or another customer's funds but only from the appropriation accounts of the ordering Federal agency . . . "

Because LANL credited the "other WFO" B&R's LDRD rebate to only WFO Program Code R51A, other customers' funds were inappropriately used to partially finance that project's reimbursable work. We believe that LANL should have totaled each "other WFO" customer's contribution to LDRD in

FY 1992 and given a proportional rebate to each customer, even if funds were only rebated to a single project in the case of customers with multiple WFO projects.

At a meeting with LANL officials on February 9, 1994, a FMD official stated LANL was anticipating an overcollection of LDRD for FY 1994 and would have to rebate this overcollection back to the major B&Rs as was done in FY 1992. In our opinion, LANL should allocate the WFO portion of the rebate back to all WFO customers, not just to one or more selected WFO customer(s).

Conclusion

We found, for the FY 1992 LDRD rebate, that LANL had rebated \$288,812, the entire amount for a category of WFO projects, to WFO Program Code R51A. We calculated that, if the rebate was prorated to all WFO projects in the category, the project should have only received a rebate of approximately \$46,000. Therefore, other WFO customers' projects within this category were inappropriately charged approximately \$243,000, while R51A's funds were improperly supplemented by the same amount.

LANL management actions were not in accordance with guidance in the then DOE Order 2200.6. While LANL may not be able to go back and correct the FY 1992 LDRD rebate, we believe that future rebates for LDRD overcollections should be refunded, in proportionate shares, to all WFO customers in the same manner in which LDRD funds were collected.

Recommendation

We recommend that the Manager, Albuquerque Operations Office:

7. Direct LANL to take any appropriate action relative to the FY 1992 LDRD rebate and to ensure future LDRD rebates are refunded to all WFO customers in proportionate shares.

The Director, AL-Financial Management Division, concurred with Recommendation 7. The Director stated that "A directive will be issued to LANL by January 1, 1995, emphasizing that future rebates for LDRD overcollections should be refunded in proportionate shares to WFO customers in compliance with their Cost Accounting Standards Disclosure Statement."