

WR-B-00-03

AUDIT  
REPORT

OUTSOURCING OPPORTUNITIES  
AT THE LOS ALAMOS NATIONAL  
LABORATORY



JANUARY 2000

U.S. DEPARTMENT OF ENERGY  
OFFICE OF INSPECTOR GENERAL  
OFFICE OF AUDIT SERVICES

January 18, 2000

MEMORANDUM FOR THE MANAGER, ALBUQUERQUE OPERATIONS OFFICE

FROM: Lawrence R. Ackerly, Regional Manager (Signed)  
Western Regional Audit Office  
Office of Inspector General

SUBJECT: INFORMATION: Audit Report on "Outsourcing Opportunities at the Los Alamos National Laboratory"

BACKGROUND

Since 1994, the Department of Energy (Department) developed an approach that required its management and operating contractors to identify and evaluate all of their services to determine whether they can be obtained at a lower cost from an outside entity. The Department also recognized, however, that the unique nature of the work performed at national laboratories, such as Los Alamos National Laboratory (Los Alamos), would preclude some services from being performed by an outside entity.

Although Los Alamos has subcontracted its security services and various facility maintenance and support services, it has traditionally performed all of its routine support services in-house. We initiated the audit to determine if Los Alamos had identified outsourcing opportunities for its support services.

RESULTS OF AUDIT

The audit found that Los Alamos had not identified all support services with outsourcing potential. Specifically, of the 184 support services Los Alamos reviewed, it determined that only 4 had outsourcing potential. However, we concluded that at least 128 of Los Alamos' support services reviewed had outsourcing potential. These services were not identified because Los Alamos' screening process was flawed. Since this process was the initial step leading to cost-benefit analyses, Los Alamos did not conduct such analyses on the majority of its support services. Thus, Los Alamos cannot ensure that about \$128 million spent on these services represent the least cost to the government.

MANAGEMENT REACTION

Management concurred with the finding and recommendations presented in this report.

# OUTSOURCING OPPORTUNITIES AT THE LOS ALAMOS NATIONAL LABORATORY

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## Overview

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### INTRODUCTION AND OBJECTIVE

In 1994, the Department of Energy (Department) developed an approach that required its management and operating contractors to identify and evaluate all of their services to determine whether they could be obtained at a lower cost from an outside entity. The Department also recognized, however, that the unique nature of the work performed at national laboratories, such as Los Alamos National Laboratory (Los Alamos), would preclude some services from outsourcing consideration.

Although Los Alamos has subcontracted its security services and various facility maintenance and support services, it has traditionally performed all of its routine support services in-house. The objective of this audit, therefore, was to determine if Los Alamos has identified outsourcing opportunities for its support services.

### CONCLUSIONS AND OBSERVATIONS

Los Alamos had not identified all support services with outsourcing potential. Of the support services it reviewed, Los Alamos determined that only 4 had a potential for outsourcing. We concluded, however, that a majority of Los Alamos' support services had outsourcing potential and that some routine support services, such as Travel, are being outsourced at other Department locations. These services were not identified because Los Alamos' screening process was flawed. Since this process was the initial step leading to cost-benefit analyses, Los Alamos did not conduct such analyses on the majority of its support services. Thus, it cannot ensure that about \$128 million spent on these services represent the least cost to the government.

The conclusions in this report parallel those of an ongoing Departmentwide audit on the management and operating contractor make-or-buy program. Both audits indicate a more proactive approach for managing the Department's make-or-buy program is needed. Additionally, there have been other Office of Inspector General reports issued where the make-or-buy program was not properly implemented. These reports are identified in Appendix 2. Management should consider issues discussed in this audit report when preparing its yearend assurance memorandum on internal controls.

(Signed)

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Office of Inspector General

## Services With Outsourcing Potential

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### Support Services With Outsourcing Potential

Los Alamos had not identified all support services with outsourcing potential. Los Alamos stated that it screened 190 support services for outsourcing potential. However, Los Alamos had outsourced 4 services before the screening process began and discontinued 2 additional support services before the process was completed. Thus, the screening specifically focused on the remaining 184 support services.

Of these 184 services, Los Alamos identified only 4 as having outsourcing potential. These services included: Production Control; Environment, Safety, and Health's Computer Programming; Closures; and Duplicating. Los Alamos eliminated one service, Closures, from further consideration because the need for this service was nearing completion and forwarded Duplicating for a cost-benefit analysis. Los Alamos personnel did not offer any explanation for the remaining two services nor was an explanation provided in their Make-or-Buy Plan. At the time of this audit, however, Los Alamos had not performed the cost-benefit analysis on Duplicating and, thus, has not evaluated or outsourced any of these services.

To determine if any of the remaining 180 services had outsourcing potential, we analyzed the questionnaires that Los Alamos used in its screening process and interviewed personnel involved with those services that appeared to be essential to Los Alamos. We determined, based on these interviews, that many of these services were not essential to Los Alamos and had the potential to be outsourced. In total, we concluded that 128 services had outsourcing potential but that 52 did not. Further, we determined that many of the 128 services were routine; that is, they included: Travel, Secretarial Services, Records Management, Training, Document Scanning, and Printing. During our analysis, we noted that one of these services, Travel, had been outsourced at Lawrence Livermore National Laboratory and Sandia National Laboratories. In fact, the Department contracts out its travel functions at various locations.

### Program Guidance

In addition to services being outsourced at other Department locations, Los Alamos personnel stated that a number of the 128 services could be performed by outside entities. Laboratory personnel, for example, pointed out that Air Quality/Air Emissions Permitting, an engineering and environmental service, can be performed by an outside entity. They also noted services, such as: Operational Safety; Compensation and Award Plan Design and Analysis; Environmental Impact Statements;

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and Training Program Design, Analysis, and Evaluation can be done by outside entities. Since Los Alamos' screening process had not identified these services as having outsourcing potential, it continues to perform all 128 in-house.

## **Requirements To Assess Outsourcing Opportunities**

The importance of and requirements for outsourcing are discussed in two key Department documents. The 1994 report, *Making Contracting Work Better and Cost Less*, concluded that significant savings could accrue to the government if functions not essential to the Department's core mission were performed by outside contractors. The importance of outsourcing was also discussed in the Department's 1997 report, *Harnessing the Market: The Opportunities and Challenges of Privatization*. This report emphasized that outsourcing decisions begin with a screening process that identifies services having outsourcing potential. The report also points out that once these services are identified, a cost-benefit analysis must be conducted to determine whether outsourcing will result in obtaining services at a lower cost.

The requirement for Los Alamos to assess outsourcing opportunities was incorporated into the contract as Clause 6.18, Make-or-Buy Plan. The clause specifically required Los Alamos to develop and implement a Make-or-Buy Plan that established a preference for providing supplies and services on a least-cost basis. In May 1996, Los Alamos began developing its "Master Make-or-Buy Plan" which was completed on March 30, 1998, and approved by the Department on April 3, 1998. The approved Plan described Los Alamos' approach for identifying and assessing outsourcing opportunities for all support services whose costs equaled or exceeded \$1million a year and specified that routine services will be obtained from the source that offered the best value/least overall cost.

Part of the decision to outsource would be based on analysis that included a screening process to identify services that had outsourcing potential. Because of the nature of Los Alamos' work, however, the Plan established limitations, such as national security considerations or critical business operations, that would preclude some services from being outsourced. The Plan defined critical business operations, in part, as those that comprised various non-scientific, non-programmatic policy setting functions and specified that such functions cannot be outsourced.

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**Identification Of  
Services With  
Outsourcing  
Potential**

Further, the Plan stated that other selected functions may also be retained in-house at the operational level.

Once the screening process identified services with outsourcing potential, Los Alamos was required to conduct a cost-benefit analysis to determine if outsourcing would result in the best-value/least cost. Thus, the screening process represented a crucial first step towards performing cost-benefit analyses and obtaining services at the least cost to the government.

There were two major reasons for Los Alamos not identifying all services with outsourcing potential in its Make-or-Buy Plan. Los Alamos' screening process was flawed, and it was leveraging its subcontractors' outsourcing to fulfill its own outsourcing requirement.

Screening Process

Los Alamos did not identify all services with outsourcing potential because its screening process was flawed. This process identified outsourcing potential by using numerical ratings to score a service. Once the scores were obtained, Los Alamos designated logical breakpoints. However, the logical breakpoints were subjectively determined and appeared to be inconsistently applied. Los Alamos' own Plan indicated that the process may have had problems. For example, certain routine services, such as: Travel, Wellness Center, Business Computing, Document Scanning, and Facilities Engineering were expected to be identified as having outsourcing potential but were not.

The Plan provided several reasons for their absence. In some cases, for example, the service was a close competitor, that is, its score fell "just below the logical break point" and "would have been included had the screening process gone one level deeper." We asked Los Alamos personnel to identify the breakpoint; however, they were not able to identify a specific breakpoint. In most cases, however, the Plan noted that the service was omitted because there was a "lack of regional economic development potential" and the service would be "a poor investment in resources for further pursuit." While Los Alamos recognized that a different breakpoint would have produced the anticipated results, it did not change its numerical process. Further, the explanation did not provide any support for the lack of regional development or give a rationale for concluding why a service represented a poor investment pursuit.

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In addition, the use of the scores to identify outsourcing potential was inconsistent. For example, Production Control was identified as a service with outsourcing potential while Fleet Management Oversight, which had a similar score, was not recommended as an outsourcing candidate. Another example was Duplicating which was identified as having outsourcing potential; however, Desktop Support had a similar score but was not identified as having outsourcing potential.

During one point in the screening process, Los Alamos' Environment, Safety, and Health Division refined its identification of outsourcing candidates. In a memorandum dated June 2, 1997, the division director identified five services: Wellness Center; Toxicology and Information Services; Computer Programming (Industrial Hygiene); Environment, Safety, and Health Manual and Documents Development; and Computer and Information Systems for Radiation Programs that were the "best candidates for the potential buy category." However, none of the five candidates were identified in the Plan as outsourcing candidates.

Even though Los Alamos' Plan identified only 4 out of 184 services as having outsourcing potential, Los Alamos Area Office (LAAO) personnel approved the Plan as fulfilling the contract requirement. LAAO explained its acceptance by stating that it approved the process used by Los Alamos; not necessarily the contents of the plan.

#### Outsourcing By Subcontractors

Los Alamos believed it was fulfilling its outsourcing requirements in the Plan through one of its major subcontractors. The subcontract required the contractor to outsource \$10 million of work in the first year and \$10 million of additional work over the next 4 years. However, we disagreed that subcontractor outsourcing fulfilled Los Alamos' requirement. Further, personnel from the Office of Privatization and Contract Reform agreed with our conclusion. In fact, they pointed out that they have been aware of Los Alamos' reluctance to consider outsourcing for some time and have stated their intention to focus on Los Alamos as soon as time and resources are available.

#### **Services At Least Cost To The Government**

As a result of not identifying all services with outsourcing potential, Los Alamos did not have to do a cost-benefit analysis on the majority of its support services. Therefore, it cannot ensure that approximately \$128 million spent on the services reviewed in this report represent the least cost



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to the government. Further, Los Alamos' outsourcing objectives--to maximize productivity, maximize job opportunities, and maximize regional economic development opportunities--may not be met.

**RECOMMENDATIONS**

We recommended that the Manager, Albuquerque Operations Office direct Los Alamos to:

1. revise the screening process to objectively identify all support services having outsourcing potential;
2. conduct a cost-benefit analysis on outsourcing candidates to determine the most economical method for obtaining the services;
3. take appropriate action based on the analyses to obtain the services at the least cost to the government; and,
4. periodically review new or retained services to determine if they have outsourcing potential.

**MANAGEMENT  
REACTION**

Management concurred with the finding and recommendations presented in the report. They discussed Make-or-Buy Plan implementation and administration deficiencies with Los Alamos representatives. According to management, Los Alamos recognized the necessity to update their Make-or-Buy Plan and correct any deficiencies in identifying potential candidates for outsourcing. Management provided assurance that the report's recommendations will be addressed in the updated plan.

**AUDITOR  
COMMENTS**

Management's comments are responsive to the recommendations.

## Appendix 1

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### SCOPE

The audit was performed at Los Alamos and at Headquarters from April 7, 1999 through December 20, 1999. We examined the Master Make-or-Buy Plan prepared by Los Alamos and dated March 30, 1998, as well as supporting documentation. We did not, however, review the addendum containing the environmental restoration and waste management activities.

### METHODOLOGY

To accomplish the audit objective, we reviewed the screening process identified in Los Alamos' Make-or-Buy Plan. The review focused on whether Los Alamos' process identified all routine support services with outsourcing potential. In addition, we interviewed Headquarters and Los Alamos personnel and reviewed the Department's reports: *Making Contracting Work Better* and *Cost Less* and *Harnessing the Market: The Opportunities and Challenges of Privatization*.

The audit was conducted in accordance with generally accepted government auditing standards for performance audits, which included tests of internal controls and compliance with laws and regulations to the extent necessary to satisfy the audit objective. There were no performance measures established for the identification of outsourcing opportunities. Because the review was limited, it would not necessarily have disclosed all internal control deficiencies that may have existed at the time of our audit. Since computerized data was not primarily used for support of the finding, we did not fully validate the reliability of it.

An exit conference was waived by the Albuquerque Operations Office on December 20, 1999.

## Appendix 2

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### RELATED OFFICE OF INSPECTOR GENERAL REPORTS

- *Audit of the Radioactive Liquid Waste Treatment Facility Operations at the Los Alamos National Laboratory*, WR-B-98-01, November 1997

Los Alamos' treatment costs were significantly higher when compared to similar costs incurred by the private sector because Los Alamos did not perform a complete analysis of privatization or prepare a Make-or-Buy plan for its treatment operations.

- *Audit of Effectiveness and Efficiency of the Rocky Flats Analytical Services Program*, CR-B-95-01, November 1994

The management and operating contractor at Rocky Flats did not evaluate alternatives to contractor-provided analytical services. Instead, the contractor used in-house laboratories to provide analytical services when less expensive and more efficient services were available from subcontract laboratories.

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