

U.S. Department of Energy Office of Inspector General Office of Audit Services

Audit Report

W76 Life Extension Project



May 2006



Department of Energy

Washington, DC 20585

May 25, 2006

MEMORANDUM FOR THE SECRETAR

FROM:

Gregory H. Friedman Inspector General

SUBJECT:

INFORMATION: Audit Report on "W76 Life Extension Project"

BACKGROUND

The current U.S. nuclear weapons stockpile has aged to the point where concerns have been raised about its ability to continue to perform reliably in the future. In response, the National Nuclear Security Administration (NNSA), working with the U.S. Department of Defense, developed strategies to refurbish the weapons stockpile to extend its deployment life. These refurbishment efforts are known as Life Extension Programs.

As part of this process, the W76 weapon system, one of the most important systems in the stockpile, will undergo refurbishment to address aging concerns and to provide long-term certification of the system. According to the W76 Life Extension Project Plan, the first production unit is scheduled to be completed by September 30, 2007. The Los Alamos National Laboratory, Sandia National Laboratories, Kansas City Plant, Y-12 National Security Complex, Pantex Plant, and Savannah River Site are involved in the effort. The cost of the refurbishment activities are estimated at about \$916 million, through the first production unit date.

Due to the W76's significance as a strategic deterrent, this audit was conducted to determine whether the W76 refurbishment will deliver the first production unit within established project parameters.

RESULTS OF AUDIT

Based on the audit work performed, we concluded that NNSA is at risk of not achieving the first production unit for the W76 refurbishment within the established scope, schedule, and cost parameters as detailed in the project plan. Specifically, we found:

- Delays in completing tests and production related milestones;
- Reductions in the scope of activities required to support final design and production decisions;
- Unexplained variances in project cost data; and,
- Incomplete documentation of changes to the project cost baseline.



Some delays and deviations occurred due to circumstances outside NNSA's control. In those cases, NNSA made appropriate changes to the program and, in so doing, accepted associated risks in order to meet program deliverables. Accordingly, these issues were excluded from our report. Rather, this report addresses delays and scope deviations that were, in our judgment, directly related to weaknesses in project management. This is illustrated by the fact that the W76 project plan, which outlines scope, schedule, and cost parameters, was not finalized until February 2004–more than five years after the project began. In addition, NNSA did not ensure that individual site schedules were linked and consistent with its overall integrated master schedule. The need to integrate master and sites schedules may be a broader problem since a similar issue was identified during prior Office of Inspector General reviews of the life extension projects for the W80 and the B61 systems. Additionally, NNSA did not fully utilize controls over project costs by documenting the reasons for changes to the project's baseline.

Failure to complete the W76 refurbishment first production unit within the established schedule and scope could have a direct effect on full-scale production decisions; impact NNSA's ability to manage project costs; and, affect overall national security goals and objectives of the refurbishment effort. Thus, we recommended that NNSA strengthen project management planning and ensure future Life Extension Programs implement the project management principles of timely comprehensive project planning; consistent cost and schedule reporting; and, adequate change control policies.

MANAGEMENT REACTION

Management agreed with the recommendations. NNSA acknowledged that there have been some scope changes and schedule delays and that project management could be strengthened. However, management stated that it believes that appropriate tools and focus are in place to ensure successful execution of the W76 refurbishment. NNSA officials also indicated that the delays would not significantly impact full-scale production. Additionally, NNSA reported that it had a valid baseline, although it noted that changes to the baseline were not always documented. Management comments are summarized beginning on page 7 and are included in their entirety in Appendix 3.

While we agree that management employed project management techniques in the W76 refurbishment effort, our review showed that their execution needed improvement. For example, although management developed a master schedule to control the refurbishment effort, we found numerous inconsistencies between the master schedule and the supporting site production schedules. Such schedule inconsistencies, in our view, make it less likely that the target date for the first production unit will be met. As previously discussed, management's expressed view is that first production unit schedule delays would not significantly affect full-scale production. However, we concluded that the schedule delays could have a cascading effect on the completion of subsequent milestones, including delaying the start of full-scale production, unless management

successfully completes the remaining work scope as scheduled.

Attachment

cc: Deputy Secretary

Administrator, National Nuclear Security Administration Under Secretary for Energy, Science and Environment Chief of Staff

REPORT ON W76 LIFE EXTENSION PROJECT

TABLE OF CONTENTS

W76 Life Extension Project

| Details of Finding | 1 |
|--------------------|---|
| Recommendations | 5 |
| Comments | 7 |

Appendices

| 1. | Objective, Scope, and Methodology | 9 |
|----|-----------------------------------|-----|
| 2. | Prior Reports | .11 |
| 3. | Management Comments | .12 |

Refurbishment Project Schedule, Scope, and Cost

The National Nuclear Security Administration (NNSA) is at risk of not achieving the first production unit for the W76 refurbishment within its intended scope, schedule, and cost parameters. In particular, we found that NNSA (1) reduced the scope of activities planned to support final design and production decisions; (2) delayed tests and production related milestones; and, (3) could not reconcile cost variances to supporting project documentation.

<u>Scope</u>

The scope of activities required for the Final Design Review (FDR) was reduced. According to project planning documentation approved by NNSA in February 2004, various component tests, including six hydrodynamic (hydrotest) and nine intermediate-scale tests, were to be completed prior to performing the FDR. The design validation information obtained from these tests is significant because the refurbishment production processes are set up based upon the design approved by the FDR. Despite the importance of these activities, NNSA and the Department of Defense accepted the potential risk and conducted the FDR in May 2005, even though two of the six planned hydrotests, intended to ensure the primary stage of the weapon will perform as designed, had not been completed. We noted that one planned hydrotest was eliminated entirely and the other delayed until June 2005. In addition, four of the nine intermediate-scale tests, designed to characterize materials, were not completed before the FDR. The remaining intermediate-scale tests were completed by April 2006 and the results of those tests are currently being evaluated.

In commenting on a draft of this report, management pointed out that the June 2005 hydrotest had excellent results; therefore, management concluded that there are no additional risks from the delayed test dates or the reduced number of tests. However, there is no way to be certain that data from those tests that were eliminated would not have impacted the refurbishment effort. Project officials reduced the scope of the purification process material testing, an activity needed to support fullscale production decisions. To meet design specifications, one of the materials used in W76 components must be processed to a required purity level. According to planning documents, seven purification tests are needed to evaluate whether the purification process will consistently produce material that meets weapon design specifications. Because the Y-12 National Security Complex testing facility experienced schedule delays, only four of the seven planned tests can be performed by the first production unit (FPU) date. While one of these tests could produce material at the required purity level, NNSA will lack the assurance it wants that the purification process will consistently produce material that meets specifications. Nonetheless, to avoid further delays, project managers agreed to produce the first refurbished weapon using the material from the four tests. The three remaining tests have been rescheduled and will be completed after the FPU date.

Schedule

About 30 percent (3 of 10) of the completed key milestones and about 20 percent (52 of 253) of the supporting activities were delayed. For example, the key milestone that allowed management to authorize funding to initiate production activities, such as testing and qualification of tooling and equipment, occurred five months later than planned due to delays in predecessor activities. As a result of this delay, only nineteen months are now allotted to complete these activities which Department of Energy (Department) guidance estimates could take as long as three years. We concluded that NNSA is at risk of not completing these milestone activities have been close to or exceeded Department estimates.

A number of the activities that support key milestones have also been delayed. For example, the planned date to begin overall system testing and analysis activities at Sandia National Laboratories has been delayed by over a year. The delays in key milestones and supporting activities such as those described above could have a cascading effect on the completion of subsequent milestones, including delaying the FPU and increasing project costs. Management acknowledged that schedule delays had occurred and believed that decisions regarding changes were made using established processes, including formal risk assessments. When high risks were identified, mitigation plans were executed and tracked to closure for the delayed activities until they were completed. However, due to the lack of documented mitigation strategies and contingency plans, we could not confirm how NNSA resolved certain high risk issues.

Cost

The audited sites could not reconcile cost variances between reported costs and project documentation. This is significant since, according to Department guidance, controlling cost is an essential element in baseline stability and project managers are responsible for successfully managing project baseline costs. We noted that the W76 project plan provided a work breakdown structure for reporting project costs and required that sites capture costs consistent with the high level elements. Additionally, NNSA required the sites to provide a crosswalk to explain deviations from the suggested structure. These costs are included in an annual *Selected Acquisition Report* to Congress, which is the W76 project's cost baseline.

During the audit, we found that three of the four sites visited could not reconcile to the project costs reported to Congress nor explain the variances, which ranged from about \$200,000 to over \$2,000,000. When we attempted to validate and reconcile project costs to reported costs, we discovered that the individual sites' structures were not consistent with the overall project's basic cost work breakdown structure, as required. Additionally, one site lacked the required crosswalk. The inability to validate project costs raises concerns about the accuracy of the information reported to Congress and whether the project will be completed within the cost parameters contained in the project plan.

In addition, we noted that the change control process was not fully utilized. According to Department Manual 413.3, *Project Management for Acquisition of Capital Assets,* performance baseline changes require approval for all Department projects, including NNSA, whose costs have increased in excess of \$25 million or 25 percent cumulative of the original cost baseline. As of December 2004, we found a cumulative cost increase to the total project cost baseline through Fiscal Year (FY) 2022 of approximately \$639 million (28 percent). However, available baseline change request documentation only supported \$84 million of that amount. According to an NNSA official, efficient verbal communication made change control process documentation less necessary.

Project Management We determined that some deviations and delays occurred due to circumstances outside NNSA's control, such as the temporary Classified Removable Electronic Media stand-down and the delay of the first flight test. Accordingly, we excluded scope and schedule issues related to those events from our report. Rather, the report addresses issues that we concluded were caused by weaknesses in project management. Specifically, we noted a lack of timeliness in project planning; ineffective control over project schedule and costs; and, a lack of risk mitigation plan documentation.

Project planning documentation was not completed in a timely manner. Although the W76 project began in October 1998, the project plan, which provides direction for the refurbishment scope, schedule, and cost, was not issued until February 2004 – five years later. Similarly, the weapon certification plan, which established hydrodynamic, intermediate, and small-scale testing requirements, was not finalized for three years. The delay in establishing these testing requirements reduced the time available to perform hydrotests, which in turn, delayed other types of testing since the same personnel are utilized for multiple testing activities. However, rather than delay key milestones, which could affect the FPU delivery date, project officials chose to adjust the scope of refurbishment activities.

The delay in finalizing planning documents and establishing testing requirements also impacted timely completion of other scheduled milestones. For example, a project official advised that a key milestone, which authorized funding to initiate production activities such as testing and qualification of tooling and equipment, occurred five months later than planned because certain prerequisite activities, such as hydrotesting, had not been completed. According to the project manager, the W76 project plan was held pending release of NNSA's guidance (guidance) on weapon refurbishment projects. However, we noted that the guidance was available in January 2003. NNSA officials agreed that the project plan should not have taken so long to complete.

The risk of schedule delays was increased because NNSA did not ensure that the site schedules were consistent with its W76 project master schedule and had been integrated. For example, we found that the master schedule included a task to install and reaccept certain refurbishment equipment at the Pantex Plant (Pantex); however, that task did not exist on Pantex's site schedule. During the audit, we noted that Pantex's project documentation showed that the task should be deleted from the master schedule. NNSA recognized the problem and is taking actions to strengthen the schedule maintenance process. In addition to the W76 refurbishment, other Office of Inspector General reports noted that inconsistencies among site schedules and master schedules also contributed to schedule delays in the W80 and B61 refurbishment projects. (See Appendix 2).

Project officials also did not maintain effective control over project costs. Specifically, NNSA had not validated project costs and did not ensure that sites met requirements for cost reporting consistent with the project's work breakdown structure. Project officials acknowledged that they have had limited success in validating costs but believed the sites' inability to reconcile the cost information contained in the annual *Selected Acquisition Reports* to Congress was attributed to accounting and funding changes, such as the reassignment of funds and adjustments for inflation. However, we believe that failure to ensure consistent reporting among sites was the significant contributing factor.

Furthermore, project management did not maintain effective control over baseline changes. Although Department guidance requires that modifications be managed through a traceable, documented process that is defined in the project plan, the W76 project plan did not require the approval of cumulative cost increases through baseline changes. Since cost documentation is key to controlling project costs, NNSA officials should have

| | he project plan included all relevant cost irements and that sites adhered to those |
|--|--|
| database to an not always do plan. For exa were identifie mitigation stra included to ad resolved. Dun interactive rist implemented. | ect officials maintained a risk management alyze scope and schedule changes, they did cument a mitigation strategy and contingency mple, the activities associated with the FDR d as a high risk in the database; however, no ategy or contingency plan information was dress how unexpected issues would be ting the audit, we noted that a more k management system was being This should improve the management of edule changes. |
| established sc on full-scale p NNSA's abilit goals and obje example, if th unexpected re | nplete the W76 refurbishment FPU within the hedule and scope could have a direct effect production decisions and processes; impact y to manage project costs; and, affect the ectives of the refurbishment effort. For e tests that have been delayed produce sults when eventually performed, there is an that established production processes may dified. |
| We recommend that the Administrator, NNSA:1. Strengthen W76 project management by ensuring that: | |
| | |
| • | Reported project schedule and cost information are validated and, if necessary, make appropriate adjustments; |
| • | Sites comply with the project work breakdown structure; |
| • | The change control process is fully utilized; and, |
| | reporting requirements. Although proj database to an not always do plan. For exa were identifie mitigation stra included to ad resolved. Dur interactive risi implemented. scope and sch Failure to con established sc on full-scale p NNSA's abilit goals and obje example, if th unexpected re increased risk have to be mo We recomment 1. Streng |

- Risk management tools document the mitigation strategy and contingency plan to address all scope and schedule changes.
- 2. Ensure future Life Extension Programs implement the project management principles of timely comprehensive project planning; consistent cost and schedule reporting; and, adequate change control policies.

MANAGEMENT REACTION AND AUDITOR COMMENTS

Management agreed with the recommendations but believed that the appropriate tools and key processes were in place to ensure successful execution of the W76 refurbishment and that the delays would have no significant impact on full-scale production. Management provided technical comments which have been incorporated within the body of the report, where appropriate. Management's overall comments are summarized below and are included in their entirety in Appendix 3.

We consider management's comments to be responsive to our recommendations. However, until management effectively utilizes all available project management tools for the effort, there will be an increased risk that the FPU may not be achieved within the baseline parameters established in the project plan.

Management Comment

NNSA acknowledged that there have been some scope changes and schedule delays, the majority of which were a result of events outside of its control, and stated that the project team evaluated impacts to the program and proposed a recovery plan of action.

Auditor Comment

We recognize that several events that delayed the project were outside management's control. Therefore, scope and schedule issues related to those events were excluded from the review. Rather, the report addresses those scope reductions and schedule delays that were attributable to weaknesses in project management. For example, preliminary documentation showed that a number of hydrotests were to be conducted by October 2003, which was nine months before the stand-down at the Los Alamos National Laboratory. However, none of the tests were performed by that date. In our view, the delay in establishing hydrotest requirements reduced the time available to perform these tests.

Management Comment

NNSA reported that it had a valid cost baseline even though it recognized that the information needed to be validated due to limited success in this area. Further, management stated that it had briefed the appropriate parties regarding baseline changes but conceded that some changes were not formally documented. Finally, although the W76 project plan references Department Order 413.3, *Project Management for Acquisition of Capital Assets*, NNSA does not believe the guidance is applicable to weapon systems.

Auditor Comment

We agree that NNSA has an overall cost baseline for the W76 refurbishment. However, the participating sites' inability to reconcile to the costs included in the baseline raises concerns about the accuracy of the information and whether the project will be completed within the cost parameters contained in the project plan. Regarding baseline change control, we agree that verbal communication is important. However, we believe that the sound project management principles contained in Department Order 413.3, Project Management for Acquisition of Capital Assets, are applicable to the W76 refurbishment since it meets the guidance's definition of a "project." Furthermore, management acknowledged that Department Order 413.3 was used to guide the implementation of its W76 project plan, and it is listed as one of the plan's reference documents.

| OBJECTIVE | To determine whether the W76 refurbishment will deliver the first production unit within the scope, schedule, and cost parameters established in the project plan. |
|-------------|--|
| SCOPE | We performed the audit from January 11, 2005, to March 7, 2006, at NNSA Headquarters; the NNSA Service Center; Los Alamos National Laboratory; Sandia National Laboratories; Pantex Plant; and, Y-12 National Security Complex. The scope of the audit was limited to W76 refurbishment activities conducted from October 1998 (project start) and planned through September 30, 2007, (the first production unit), with the exception of cost parameters which were analyzed through FY 2022. |
| METHODOLOGY | To accomplish the audit objective, we: |
| | • Identified the W76 LEP technical scope, scheduled milestones, and cost; |
| | • Analyzed the status of the project and the contractors' performance; |
| | • Discussed W76 refurbishment activities with NNSA and contractor personnel, including visits to four of the six participating sites; |
| | • Reviewed NNSA regulations and contractor procedures governing refurbishment projects; and, |
| | • Reviewed results of prior audits and reviews. |
| | We conducted the audit according to generally accepted Government auditing standards for performance audits and included tests of internal controls and compliance with laws and regulations to the extent necessary to satisfy the audit objective. Because our review was limited, it would not necessarily have disclosed all internal control deficiencies that may have existed at the time of our audit. The computer-processed data used to support the audit had a significant impact in determining our schedule and cost |

findings. However, due to inconsistencies in schedule and cost reporting, we were unable to express an opinion on the reliability of the data. Therefore, we recommended that the schedule and cost of the project be validated.

Finally, we assessed NNSA's compliance with the Government Performance and Results Act of 1993. We found that the Department established specific performance objectives related to the refurbishment of the W76 weapon system. In particular, we noted that the project had outlined numerous key milestones with measurable deliverables.

Management waived an exit conference.

PRIOR REPORTS

- *The Los Alamos National Laboratory Hydrodynamic Test Program* (DOE/IG-0699, September 2005). The report evaluated the Hydrodynamic Test (hydrotest) Program at the Los Alamos National Laboratory (Los Alamos). The audit concluded that Los Alamos did not complete hydrotests as scheduled in support of the National Nuclear Security Administration's (NNSA) Stockpile Stewardship Program and may not have the capacity to meet future hydrotest needs.
- The National Nuclear Security Administration's Refurbishment of the B61 (DOE/IG-0697, August 2005). The report evaluated the current refurbishment of the B61 weapon system, Alteration 357. The audit found that NNSA experienced delays that were avoidable had the proper internal control structure been in place; that NNSA did not have a valid estimate of total refurbishment costs; and, that NNSA did not follow established procedures when making scope changes to the refurbishment project. The audit concluded that NNSA had not ensured that the individual production schedules of participating sites were linked and consistent with its overall integrated master schedule.
- *Refurbishment of the W80-Weapon Type* (DOE/IG-0590, March 2003). The report evaluated the current refurbishment of the W80 weapon system. The audit concluded that (1) there were inconsistencies between the NNSA project plan and the sites' detailed plans; (2) the project lacked change control or other means to ensure that the NNSA manager knew when the sites made changes that could impact cost, scope or schedule; and, (3) scheduled peer reviews had been delayed.
- Nuclear Weapons: Opportunities Exist to Improve the Budgeting, Cost Accounting, and Management Associated with the Stockpile Life Extension Program (GAO-03-583, July 2003). The report evaluated the accounting and management of stockpile life extension programs. The audit found that all associated costs were not included with the life extension programs' Fiscal Year 2003 budgets. Also, the Government Accountability Office concluded that NNSA did not have an adequate planning, organization, cost, and schedule oversight process for refurbishments.

Department of Energy National Nuclear Security Administration Washington, DC 20585



April 19, 2006

MEMORANDUM FOR

George W. Collard Assistant Inspector General for Performance Audits

FROM:

Michael C. Kane Michael C. Kane Aministrator for Management and Administration

SUBJECT:

Comments to Draft Report on W76 Life Extension Project; A05YT027/2004-52026

The National Nuclear Security Administration (NNSA) appreciates the opportunity to have reviewed the Inspector General's (IG) draft report, "W76 Life Extension Project." We understand that the purpose of the audit was to determine whether the refurbishment will deliver the first production unit within the scope, schedule, and costs established in the project plan.

The W76 refurbishment is a high priority for NNSA and for National Security. While the IG noted that we might be unable to complete the refurbishment in a timely manner, NNSA believes that the appropriate management tools and management focus are in place to ensure successful execution of the W76 refurbishment. Although there have been some schedule delays – many of them, as noted by the IG, out of the programs control, we believe there will be no significant impact on full-scale production.

NNSA appreciates the validation by the IG of programmatic information provided by our program managers. However, we offer the following technical comments for the purpose of clarity:

The IG comments "that the NNSA sites could not reconcile cost variances between reported costs and project documentation" and "that the inability to validate project costs raises concerns about the accuracy of the information reported to Congress and whether the project will be completed within the cost parameters contained in the project plan" are not completely accurate. The NNSA has a valid cost baseline for the Life Extension Project (LEP). The management process for cost includes tracking and reporting cost, highlighting any deviation from established planning guidance. NNSA management can make informed decisions based on cost information and potential program frivers such as changes in



scope or new requirements. NNSA is required by the joint Department of Defense (DoD)/Department of Energy Phase 6.X process to establish a baseline cost report by the end of Phase 6.3 (August 2005). For the W76 LEP the annually updated Selected Acquisition Report (SAR) is the program baseline required by the Phase 6.X process. The initial W76 LEP cost estimate was establish in the Weapons Design and Cost Report (WDCR) in FY 2002 at \$1,868M. This baseline cost has evolved each year as follows: 2003: \$2,094M; 2004: \$2,175M; 2005 \$6,161M; 2006: \$2,675M; 2007: \$2,649M. Each of the reports documents the baseline at the time of the report as well as changes to the scope, cost, and schedule of the W76 LEP during the year from the last report. In addition to external scope drivers, these estimates are driven by mandated changes in the reporting of operating cost (overhead rates.) As an example of the variability caused by these cost changes, a comparison is cited between sunk costs through FY 2005 and projected sunk costs, as updated each year in the baseline:

- FY 2005 sunk cost 13% below FY 2002 WDCR projection,
- FY 2005 sunk cost 4% below FY 2003 Nuclear Weapons Acquisition Report projection,
- FY 2005 sunk cost 1% below FY 2004 SAR projection, and
- FY 2005 sunk cost 7% below FY 2005 SAR projection.

The majority of the changes in the W76 LEP scope and schedule that the IG cites in the report were a result of a DoD flight test problem or the safety and security stand-down of Los Alamos National Laboratory (LANL) both of which impacted the W76 LEP activities but were not a result of the execution of the W76 LEP activities. In the instances cited the project team evaluated the impacts to the program and proposed a recovery plan of action. Then in a accordance with the project's change control process the project manager briefed, as appropriate, the NNSA's Defense Program Office management, the Project Officers Group (led by the U.S. Navy), and the DoD/DOE Nuclear Weapons Council on the changes required to support the First Production Unit (FPU) planned for September 2007. Each organization has approved these changes to the W76 LEP baseline. However, the IG is correct that there are instances where changes to the project plan were not formally documented in accordance with the established W76 LEP change control process.

NNSA agrees with the recommendation to strengthen project management. We believe that the key processes to effectively management the W76 LEP are in place. While there is always room for improvement, we want to note that NNSA is adhering to the Departmental order for construction projects, the manual for

2

Weapon Programs and Campaigns, and the Business Operating Policy on project management. NNSA equally agrees with the recommendation that future LEPs should implement project management principles in a timely fashion.

Attached are technical comments for the IG to use as may be appropriate. We believe that the comments provided will add clarity to the report. Should you have any questions about this response, please contact Richard Speidel, Director, Policy and Internal Controls Management.

Attachment

cc: Thomas P. D'Agostino, Deputy Administrator for Defense Programs Robert Braden, Senior Procurement Executive Karen Boardman, Director, Service Center 3

CUSTOMER RESPONSE FORM

The Office of Inspector General has a continuing interest in improving the usefulness of its products. We wish to make our reports as responsive as possible to our customers' requirements, and, therefore, ask that you consider sharing your thoughts with us. On the back of this form, you may suggest improvements to enhance the effectiveness of future reports. Please include answers to the following questions if they are applicable to you:

- 1. What additional background information about the selection, scheduling, scope, or procedures of the inspection would have been helpful to the reader in understanding this report?
- 2. What additional information related to findings and recommendations could have been included in the report to assist management in implementing corrective actions?
- 3. What format, stylistic, or organizational changes might have made this report's overall message more clear to the reader?
- 4. What additional actions could the Office of Inspector General have taken on the issues discussed in this report which would have been helpful?
- 5. Please include your name and telephone number so that we may contact you should we have any questions about your comments.

| Name | Date |
|-----------|--------------|
| Telephone | Organization |

When you have completed this form, you may telefax it to the Office of Inspector General at (202) 586-0948, or you may mail it to:

Office of Inspector General (IG-1) Department of Energy Washington, DC 20585

ATTN: Customer Relations

If you wish to discuss this report or your comments with a staff member of the Office of Inspector General, please contact Judy Garland-Smith (202) 586-7828.

The Office of Inspector General wants to make the distribution of its reports as customer friendly and cost effective as possible. Therefore, this report will be available electronically through the Internet at the following address:

U.S. Department of Energy Office of Inspector General Home Page <u>http://www.ig.doe.gov</u>

Your comments would be appreciated and can be provided on the Customer Response Form.