



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

Audit Report

International Materials Protection,
Control and Accountability
Nonproliferation Initiative

DOE/IG-0603

June 2003



Department of Energy

Washington, DC 20585

June 4, 2003

MEMORANDUM FOR THE SECRETARY

FROM:

Greg Friedman
Gregory H. Friedman
Inspector General

SUBJECT:

INFORMATION: Audit Report on "International Materials Protection, Control and Accountability Nonproliferation Initiative"

BACKGROUND

The Department of Energy is responsible for initiatives designed to reduce the threat related to nuclear materials and weapons in the former Soviet Union (FSU). One of the most prominent initiatives is the International Materials Protection, Control and Accountability (IMPC&A) program, whose objective is to reduce the risk posed by weapons and weapons-usable nuclear material at 95 sites in the FSU. The Department commits about \$250 million annually to this initiative.

Over the past several years, Congress expressed concern that a significant percentage of IMPC&A funds was being expended at the Department's national laboratories rather than in the FSU. Accordingly, appropriators established programmatic spending targets for succeeding years, urged the Department to reduce overhead, and suggested the transfer of contracting responsibilities from the national laboratories to Federal contracting activities. Also, as recently as May 2003, the Senate Armed Services Committee noted that a large portion of IMPC&A funds remained unspent and urged NNSA to improve its management focus with respect to this program. Based on these concerns, as well as on a previous Office of Inspector General review (*Nuclear Material Protection, Control and Accounting Program*, DOE/OIG-0452, September 1999), which found that IMPC&A resources were not always used to fund projects on a prioritized basis, we performed an audit to determine whether the Department had satisfied Congressional and programmatic goals for its IMPC&A program.

RESULTS OF AUDIT

The Department may not be maximizing the performance of the IMPC&A program as a result of several continuing problems that may diminish its overall effectiveness. Notably, a significant portion of program funding was expended and accumulated in the



U.S. rather than being used directly to reduce or ameliorate proliferation risks in the FSU. Specifically, the Department:

- Exceeded Congressional targets for funds expended at the national laboratories by about \$8.5 million in FY 2001 and \$5.2 million in FY 2002;
- Permitted uncommitted funds to increase from \$65.8 million in FY 2001 to about \$133 million by the end of FY 2002; and,
- Had not specifically identified or pursued opportunities to increase procurement efficiencies and reduce overhead charges.

These issues persisted because the Department had not established a formal, risk-based approach to allocating program funding and had not developed specific, quantifiable performance measures. Without the successful implementation of needed improvements, ongoing nonproliferation initiatives could be jeopardized.

We recognize that the difficulties of working in the FSU may have affected the success of the program and its ability to meet targets. However, additional action is necessary if the Department is to be successful in responding to the increasing emphasis the President and Congress have placed on nonproliferation efforts. We recommended that the Department develop a risk-based approach to funding allocation and establish specific, quantifiable performance measures--with milestones and spending targets--to guide execution of the program. As we noted in our recent report on *Management Challenges at the Department of Energy* (DOE/OIG-0580), the integration of budget and performance measurement is essential if the Department is to satisfy the President's Management Initiative in this area.

MANAGEMENT REACTION

The National Nuclear Security Administration (NNSA) did not specifically concur or non-concur with the report and recommendations. However, NNSA's Associate Administrator for Management and Administration acknowledged our concern about the importance of a risk-based approach for allocation of funding and the need for developing performance measures for spending targets, uncommitted balances and procurement efficiencies. Management stated that its Planning, Programming, Budgeting and Evaluation process, which is continuing to evolve, will ultimately resolve the concerns raised during the audit.

Attachment

cc: Deputy Secretary
Administrator, National Nuclear Security Administration

INTERNATIONAL MATERIALS PROTECTION, CONTROL AND ACCOUNTABILITY NONPROLIFERATION INITIATIVE

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PROGRAM EXECUTION AND PERFORMANCE

Program Performance

In 2000, the Congress expressed general concern that a disproportionate share of the funds appropriated for the International Materials Protection, Control and Accountability Nonproliferation Initiative (IMPC&A) program was expended for program direction and overhead rather than for in-country former Soviet Union (FSU) nonproliferation activities. Congress attempted to address these concerns by imposing several targets and goals for program expenditures.

Despite the Congressional targets, the IMPC&A program had not met programmatic goals for expending funds in the FSU. Further, we noted that the program had accumulated large uncommitted balances and that program officials had not taken sufficient action to reduce national laboratory overhead charges and minimize procurement-related costs. The Department's national laboratories play a lead role in managing the IMPC&A program.

Spending Targets and Results

During 2001, Congress directed that at least 57 percent of funds appropriated for the IMPC&A program be spent in the FSU rather than the U.S. For Fiscal Year (FY) 2002, Congress indicated that it expected the percentage of funds spent in the FSU to increase in each year after FY 2001, but did not establish a fixed goal. In addition to establishing specific spending targets, Congress reiterated concerns regarding spending patterns by noting in the FY 2003 Senate Appropriations Committee Report that "...a substantial portion of the total appropriated funding for fiscal year 2002 remains unspent and unobligated."

Even though FSU-targeted spending has increased in recent years, the program was unable to satisfy goals in both FY's 2001 and 2002. Despite specific Congressional direction, the Department continued to exceed targets for expending funds at its National Laboratories as opposed to the FSU. Specifically, 51 percent and 46 percent of the Department's expenditures in FY's 2001 and 2002, respectively, were at facilities in the U.S. As a result, the Department exceeded its targets for those years by about \$8.5 million and about \$5.2 million, respectively. Uncommitted balances also increased from \$65.8 million in FY 2001 to about \$133 million by the end of FY 2002.

Program Efficiencies

In addition to establishing spending targets, Congress also directed the Department to reduce laboratory overhead and expressed concern over contracting costs. In reports accompanying the FY 2002

Appropriations Bill, Congress directed the Department to apply the lowest possible laboratory overhead rates to nonproliferation programs and urged the Department to consider the use of Federal procurement staff to further reduce program costs.

While certain laboratories made progress in reducing contracting costs, we observed that indirect procurement charges varied widely among sites and, in at least one case, were underreported. For example, while Sandia National Laboratory managed to decrease procurement charges from 28 percent to 2.5 percent, resulting in a savings of \$10 million in FY's 2001 and 2002, entities such as Argonne National Laboratory continued to assess indirect charges of up to 24 percent. Even though Lawrence Livermore National Laboratory reported that its indirect charges had decreased to about 7.7 percent, we determined that it achieved such appearance by improperly classifying indirect costs associated with the FSU procurements as direct labor. Based on our testing, we determined that Livermore charged a total of \$2.6 million in indirect costs (15.6 percent) but misclassified \$1.3 million of those costs as direct labor. Program officials informed us that they were not aware of Sandia's overhead reduction initiatives and had not taken specific action to influence laboratory overhead rates.

The Department had also not significantly increased the utilization of Federal contracting capability. Specifically, the Department did not perform a cost-benefit analysis to determine the extent to which the use of Federal staff could reduce program costs. At the time of our review, the program had only used Federal personnel to award one contract valued at \$3 million, out of a total of \$134 million. Based on studies performed by the Headquarters Office of Procurement, potential cost savings from expanded use of the Federal capability could be substantial as the direct cost alone (salaries and benefits) of laboratory procurements are twice those of Federal actions.

Program and Cost Controls

The Department was unable to satisfy Congressional goals for the IMPC&A program. The audit disclosed that the Department had not established a formal, risk-based approach to allocating program funding and had not developed specific, quantifiable programmatic performance measures.

Despite the complexities of the IMPC&A program and the importance of nuclear security in reducing terrorist threats, the Office of International Nuclear Materials Protection and Cooperation had not developed and implemented a formal, risk-based approach to allocating funding. While program officials told us that funding decisions were based on factors such as the attractiveness and quantity of material and degree of access, they also indicated that a formal weighting process to rank projects was not in place. These officials believed that allocation decisions were appropriate because they were based on meetings with senior IMPC&A and Office of Defense Nonproliferation managers, but conceded that they had not developed a prioritized list of projects or funding candidates.

The Department also lacked specific, quantifiable performance measures necessary to monitor contractor performance and overall program progress. Performance targets adopted for FY 2002 did not identify expectations concerning the composition of costs or the expeditious use of resources to fund work in the FSU. In addition, measures included in the FY 2003 Annual Performance Plan did not include specific expectations regarding Congressional spending targets, the reduction of uncommitted balances, or improving the efficiency of the procurement process. Monitoring methods currently in place are also not sufficiently detailed and did not provide information needed to effectively manage the program. For example, while the program required laboratories to submit monthly reports identifying components of cost, specific spending goals had not been established, required reports were insufficiently detailed to permit the identification of incorrect or misclassified costs, and validation of reported costs was not required.

Program Successes and Challenges

Although the IMPC&A program had not satisfied Congressional targets, management officials reported that progress had been made in recent years. For example, they reported that the program had increased the percentage of funds spent in the FSU from 44 percent in FY 1999 to 54 percent in FY 2002. Program officials also told us that the challenge of placing procurements in the FSU and unexpected supplemental funding contributed to the accumulation of unobligated balances. Federal officials indicated that the contractual process is complicated by factors such as adverse weather conditions and the reluctance on the part of the Russians to grant access to sensitive sites. Because of these complexities and challenges, we believe measures to ensure that high-risk issues are addressed in a timely manner are critical to near-term success of the program.

**Program Success
Impacts**

Without a risk-based approach, the Department cannot be assured that it is addressing the most pressing material or sites protection needs and may continue to accumulate unspent or unobligated funds. Without improvement, ongoing nonproliferation initiatives to contain access to attractive and potentially dangerous materials could be jeopardized.

The President and the Secretary have noted the importance of working with other governments to secure nuclear materials in the FSU. The success of this program is critical to the security of the United States, as efforts by rogue nations or terrorists to obtain nuclear materials and deploy weapons of mass destruction continue to increase. While the Department has made great strides in this area, additional action is necessary if the program is to achieve its maximum potential given available funding.

RECOMMENDATIONS

To improve administration and execution of the IMPC&A program, we recommend that the Administrator, NNSA:

1. Develop and implement a risk-based approach to funds allocation; and,
2. Develop performance targets related to meeting Congressional spending targets, the reduction of uncommitted balances, and improving the efficiency of the procurement process.

MANAGEMENT REACTION

The response from the Associate Administrator for Management and Administration, NNSA, is included as Appendix 3. Management did not specifically concur or non-concur with the report conclusion and recommendations.

NNSA acknowledged our concern about the importance of a risk-based approach for allocation of funding and the need for developing performance measures for spending targets, uncommitted balances and procurement efficiencies. Management believes that the evolution of its Planning, Programming, Budgeting and Evaluation process will satisfy the concerns raised during this audit. This same process is being used to ensure the development of performance measures for spending targets, uncommitted balances and procurement efficiencies, and is expected, over time, to fully address these concerns.

AUDITOR COMMENTS

Although NNSA did not specifically concur with the report conclusion and recommendations, its response echoed our concern about the need to ensure a risk-based approach in determining project funding allocations and satisfies the intent of our recommendations.

Appendix 1

OBJECTIVE

The objective of this audit was to determine whether the Department had satisfied Congressional and programmatic goals for its IMPC&A nonproliferation related program.

SCOPE

The audit was performed from April through November 2002 at NNSA Headquarters program offices in Washington, D.C.; Oak Ridge National Laboratory in Oak Ridge, TN; Lawrence Livermore National Laboratory in Livermore, CA; and Sandia National Laboratories in Albuquerque, NM. The audit universe included the IMPC&A program that received \$170 million in funding during FY 2001 and \$323 million in FY 2002. A judgmental sample of \$12.8 million in costs reported by the three laboratories during FY 2001 and FY 2002 were selected for audit.

METHODOLOGY

To accomplish the audit objective we interviewed key Department and contractor personnel and reviewed:

- Congressional Committee and Conference Reports issued during FY's 2001 and 2002 on the expected performance of the IMPC&A;
- Departmental Congressional Budget Requests and Annual Performance Plans for FY's 2002 and 2003;
- Supporting documentation and justification for program costs reported by national laboratories during FY's 2001 and 2002; and,
- Prior audit reports of the IMPC&A program.

The audit was performed in accordance with 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. Specifically, we tested controls with respect to the Department's management of the IMPC&A Nonproliferation program. 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. We relied on computer-processed data to accomplish our audit objective. We performed limited test work of data reliability during our audit and determined that we could rely on the computer- processed data. An exit conference was waived.

PRIOR REPORTS

- *Nuclear Material Protection, Control, and Accounting Program* (DOE/IG-0452, September 1999). The audit found that the Department lacked assurance that IMPC&A resources were used to fund upgrades on a prioritized basis and that installed upgrades were functioning as intended.
- *Nuclear Nonproliferation: DOE's Efforts to Assist Weapons Scientists in Russia's Nuclear Cities Face Challenges* (GAO-01-429, May 2001). The audit found that the Department had spent the majority of the funding for the Nuclear Cities Initiative at the national laboratories, and that a large portion of these funds were spent on overhead.
- *Nuclear Nonproliferation: Security of Russia's Nuclear Material Improving; Further Enhancements Needed* (GAO-01-312, February 2001). The audit found that the IMPC&A program progress had been limited due to access restrictions imposed by the FSU.
- *Nuclear Nonproliferation: Limited Progress in Improving Nuclear Material Security in Russia and the Newly Independent States* (GAO/RCED/NSIAD-00-82, March 2000). The audit found that the Department had experienced delays in upgrading the security at nuclear facilities in the FSU due to access limitations imposed by the FSU. The audit also found that the Department had no cost or schedule estimates for the work being performed.
- *Nuclear Nonproliferation: Concerns With DOE's Efforts to Reduce the Risks Posed by Russia's Unemployed Weapons Scientists* (GAO/RCED-99-54, February 1999). The audit found that the IPP program had spent the majority of funds at the national laboratories, and had failed to achieve the program goal of providing long-term employment for former weapons scientists in the FSU.

Appendix 3



Department of Energy
National Nuclear Security Administration
Washington, DC 20585

APR 14 2003

MEMORANDUM FOR Frederick D. Doggett
Deputy Assistant Inspector General
for Audit Services

FROM: Anthony R. Lane *Anthony R. Lane*
Associate Administrator
for Management and Administration

SUBJECT: Comments to the IG's Draft Report on International
MPC&A Nonproliferation Initiative

The National Nuclear Security Administration (NNSA) appreciates the opportunity to have reviewed the Inspector General's (IG) draft audit report, "International Materials Protection, Control and Accountability Nonproliferation Initiative." I have attached the technical comments that were previously submitted to you by the Acting Deputy Administrator for Defense Nuclear Nonproliferation on March 19, 2003. This memorandum addresses the recommendations of the report.

The IG recommended that the program develop and implement a risk-based approach to funds allocation. We understand that the IG believes that without a risk-based approach, the program cannot be assured that it is addressing the most pressing material or sites protection needs and may continue to accumulate unspent or unobligated funds. The program does not have a formal risk-based analysis program to assist in prioritization. However, there is a methodology in place that factors all information leading to funding determinations. The hierarchical methodology is captured in NNSA's Planning, Programming, Budgeting and Evaluation (PPBE) process. This process has been implemented within the NNSA and is the basic process utilized to ensure proper planning and programming occurs, funds are requested and applied, and programs are evaluated to ensure mission requirements are being met. Managers at all levels have latitude regarding their decision making processes. But all processes are part and parcel of the PPBE structure.

The IG further recommended that the program should develop performance targets related to meeting Congressional spending targets, reduce uncommitted balances, and improve the efficiency of the procurement process. The intent of this recommendation is also captured in NNSA's PPBE process. The PPBE process continues to evolve through each iteration of Fiscal Year budgeting.



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Appendix 3 (continued)

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NNSA believes that the concerns raised by the IG will, in fact, become moot as the entire PPBE process matures.

Should you have any questions, please contact Richard Speidel, Director for Policy and Internal Controls Management. He can be reached at 202-586-5009.

Attachment

cc: Ken Baker, Acting Deputy Administrator
for Defense Nuclear Nonproliferation, NA-20
David Marks, Director, Office of Field Financial Management, NV

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