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Report on

Audit of the Management and Cost of the Department of Energy's Protective Forces

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United States Government

Department of Energy

memorandum

DATE: July 27, 1994

REPLY TO
ATTN OF: IG-1

SUBJECT: INFORMATION: Report on "Audit of the Management and Cost of the Department of Energy's Protective Forces"

TO: The Secretary

BACKGROUND:

The Department of Energy's safeguards and security program is designed to provide appropriate, efficient, and effective protection of the Department's nuclear weapons, nuclear materials, facilities, and classified information. These items must be protected against theft, sabotage, espionage, and terrorist activity, with continuing emphasis on protection against the insider threat. The purpose of the audit was to determine if protective forces were efficiently managed and appropriately sized in light of the changing missions and current budget constraints. The attached report is being sent to inform you of our findings and recommendations.

DISCUSSION:

The Department's safeguards and security costs have more than tripled since 1982 to an estimated Fiscal Year 1992 level of \$1.2 billion. During the latter part of this period, production of nuclear weapons ceased, weapons were returned from the Department of Defense, and materials were retained in storage.

We found that the cost of physical security at some sites had grown beyond those costs incurred when the site was in full production. This increase was due to a combination of factors, including concerns about the adequacy of physical security, reactions to the increase in terrorism in the early 1980s with the possibility of hostile attacks, and the selection of security system upgrades without adequate consideration of cost effectiveness. Ongoing projects to upgrade security systems were not promptly reassessed when missions changed and levels of protection were not determined in a way which considered the attractiveness of the material being protected.

We also noted several opportunities for the Department to improve the operational efficiency of its protective force operations, including, eliminating overtime paid to officers prior to completion of the basic 40-hour workweek, paying hourly wages of unarmed guards which are commensurate with their duties, consolidating protective force units, transferring law

enforcement duties to local law agencies, eliminating or reducing paid time to exercise, and standardizing supplies and equipment used by protective force members.

We made recommendations to improve the efficiency of protective force operations. The Director of Security Affairs generally agreed with our findings and recommendations and stated that recent and planned initiatives have resulted in a reduction of 17 percent in the Fiscal Year 1995 Congressional Budget Request compared to Fiscal Year 1992.

While the recommendations in the report are addressed to the Office of Security Affairs for action, several other offices involved in Departmental security provided comments on the report. The Program Offices for Defense Programs and Environmental Restoration and Waste Management, and the Deputy Assistant Secretary for Security Evaluations for Environment, Safety, and Health agreed with the report.

John C. Layton
Inspector General

Attachment

cc: Deputy Secretary
Under Secretary

U.S. DEPARTMENT OF ENERGY
OFFICE OF INSPECTOR GENERAL

AUDIT OF THE MANAGEMENT AND COST OF THE
DEPARTMENT OF ENERGY'S PROTECTIVE FORCES

Report Number: DOE/IG-0354
Date of Issue: July 27, 1994

Capital Regional Audit Office
Germantown, Maryland 20585

AUDIT OF THE MANAGEMENT AND COST OF THE
DEPARTMENT OF ENERGY'S PROTECTIVE FORCES

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U.S. DEPARTMENT OF ENERGY
OFFICE OF INSPECTOR GENERAL
OFFICE OF AUDITS

AUDIT OF THE MANAGEMENT AND COST OF THE
DEPARTMENT OF ENERGY'S PROTECTIVE FORCES

Audit Report Number: DOE/IG-0354

SUMMARY

The Department of Energy (Department) had a security force of more than 5,600 uniformed personnel to protect its nuclear weapons, nuclear materials, facilities, property, and classified information against theft, sabotage, espionage, terrorist activity, and insider threats.

The Department's safeguards and security costs have more than tripled since 1982 to an estimated Fiscal Year 1992 level of \$1.2 billion. During the latter part of this period, production of nuclear weapons ceased, weapons were returned from the Department of Defense, and materials were retained in storage.

The purpose of the audit was to determine if security systems, including security forces, were managed in a cost-effective manner in line with the Department's changing missions and current budget constraints. During our audit, we visited 10 nuclear sites, which represent 60 percent of the Department's 1992 safeguards and security budget and 65 percent of the security force.

The Department's Office of Security Affairs and the two Program Offices—Defense Programs and Environmental Restoration and Waste Management—which are responsible for executing safeguards and security programs at nuclear sites, have initiated programs to systematically assess facilities and to identify an "appropriate" safeguards and security posture for the future. While these efforts should reduce costs in the future, the audit identified additional opportunities to improve operational efficiency and reduce protective forces costs.

We found that costs of security had grown beyond those costs incurred when the sites were in full production. A number of factors contributed to the increase cost including concerns about the adequacy of physical security, reactions to the increase in terrorism in the early 1980s with the possibility of hostile attacks, and the selection of security system upgrades without adequate consideration of cost-effectiveness. Ongoing projects to upgrade security systems were not promptly reassessed when missions changed and levels of protection were not determined in a way that considered the attractiveness of the material being

protected. At two sites, security costs could be reduced by reassessing ongoing upgrades that were expected to cost about \$62 million to complete. Additional savings could be achieved at a third site by reducing the level of protection provided.

We also noted several opportunities for the Department to improve the operational efficiency of its protective forces. At the 10 sites visited, we estimated that substantial savings could be achieved each year if physical fitness, overtime, and other practices were better controlled, and supplies and equipment were standardized. For example, the Department pays security police officers (armed officers) about \$15 million annually to participate in a mandatory exercise program so that they can meet physical fitness qualification standards. Other operating practices have increased labor costs to the point that overtime costs ranged from 16 to 56 percent of gross wages at the sites visited; a few officers earned more than \$93,000 a year, of which about \$70,000 was for overtime.

Some of the changes recommended in this report require modification of union agreements. We acknowledge that this is a difficult task; however, the current effort to "right size" the Department's facilities provides the Department and its contractors an opportunity to reexamine union agreements.

The Director of Security Affairs generally agreed with the report findings and recommendations and stated that recent and planned initiatives have resulted in a reduction of 17 percent in the Fiscal Year 1995 Congressional Budget Request compared to Fiscal Year 1992.

The Office of Environment, Safety, and Health, which is responsible for overseeing implementation of safeguards and security policies, and the Program Offices for Defense Programs, and Environmental Restoration and Waste Management, which have responsibility for funding and executing safeguards and security programs at nuclear weapons sites, also agreed with the report.

Office of Inspector General
Office of Inspector General

PART I

APPROACH AND OVERVIEW

INTRODUCTION

Since the beginning of nuclear weapons production in the 1940s, the Department and its predecessor agencies have been required to protect their nuclear facilities from unwanted intrusions. The cost of this protection has more than tripled since 1982 to an estimated 1992 level of \$1.2 billion, including \$417 million for protective forces to guard the Department's nuclear facilities.

We reviewed the Department's protective forces to see if they were efficiently managed in light of changing missions and current budget constraints. Overall, the objective of the audit was to determine what factors were driving security costs. Specific objectives were to determine if (1) the Department was adequately controlling security costs, (2) levels of security were appropriate, and (3) security was provided in the most efficient and cost-effective manner.

SCOPE AND METHODOLOGY

To determine if protective forces were managed in an efficient and cost-effective manner, we reviewed: actions taken as a result of mission changes; implementation of the current threat policy; innovative approaches at individual sites to reduce costs; standardization of supplies and equipment; and centralization of operations. We reviewed applicable Federal regulations, Departmental orders, and implementing procedures and practices at Headquarters and at 10 sites. Because the audit, "Overtime and Staff Management at Martin Marietta Energy Systems, Inc. Y-12 Plant - Security Patrol Department" was recently completed on patrol relief, extended shifts, and absence costs, we did not review those areas. In addition, the audit, "Staff Management of Security Personnel at Martin Marietta Energy Systems, Inc. Portsmouth Gaseous Diffusion Plant," covered vacation and training relief staffs.

The 10 sites visited represented about 60 percent of the estimated \$1.2 billion safeguards and security budget for 1992 and 65 percent of the 5,600 uniformed officers. At the sites, we reviewed: transition plans and actions taken to improve operational efficiency and reduce costs; implementation of the physical fitness program; and protective force operational procedures. Vulnerability assessments used to determine security measures needed to protect potential targets were also

reviewed. We compared the different practices at the field sites to identify initiatives that may have Departmentwide application. The following map shows the sites that we visited.

Nuclear Sites Visited

At Department Headquarters, we met with representatives of the Offices of Safeguards and Security, Defense Programs, and Environmental Restoration and Waste Management to discuss protective force policies and initiatives related to the transition from weapons production to environmental restoration. We also met with the Department's Office of Threat Assessment which obtains terrorist threat data and coordinates activities with the Federal Bureau of Investigation and other intelligence agencies. In addition, we met with officials of the Nuclear Regulatory Commission to discuss threat policies and protective force policies and procedures.

We did not rely extensively on computer-processed data and, therefore, did not fully examine the reliability of the data. The audit was made 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 objective of the audit.

We assessed the significant internal controls to determine whether the Department's Headquarters and field organizations had exercised adequate management and control over protective force operations. 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 audit was performed during the period December 1992 through April 1993 and included transactions current as of March 31, 1993. The firm of Irving Burton Associates, Inc. participated with the Office of Inspector General in conducting this audit.

BACKGROUND

The Safeguards and Security Program is designed to provide appropriate, efficient, and effective protection of the Department's nuclear weapons, nuclear materials, facilities, and classified information. In the early 1980s, the Congress and the Department emphasized increased protection at nuclear facilities to guard against hostile attacks. This increased protection resulted in increased costs for intrusion detection devices, alarm systems, and armed officers.

Over the last decade, these costs have more than tripled to an estimated 1992 level of \$1.2 billion. Expressed in constant dollars adjusted for inflation, costs have doubled. As illustrated in the following chart, the largest portion of these costs is for operations, which includes \$417 million for protective forces.

Departmentwide Safeguards and Security Costs

Although nuclear materials production was discontinued, the Department will continue to maintain existing special nuclear material in inventory and will receive additional nuclear material returned from the Department of Defense. Because of this changing mission, the Department recognized a need to reassess its security posture. On November 6, 1992, the Under Secretary tasked the Director of Security Affairs to develop a program to assess Department facilities and security program activities. The objective of the assessment was to identify opportunities for program savings resulting from recent and planned mission adjustments. While this effort should reduce costs in the future, it was not completed at the conclusion of our audit.

OBSERVATIONS AND CONCLUSIONS

The Department had a number of efforts underway to reduce security costs without lowering security effectiveness. The Office of Security Affairs and the program offices were participating in a Safeguards and Security Assessment Program to systematically identify opportunities for program savings resulting from recent and planned mission adjustments. In addition, both the Office of Environmental Restoration and Waste Management and the Office of Defense Programs were pursuing security cost efficiency at their field sites. The Office of the Deputy Assistant Secretary for Security Evaluations routinely identified inefficient security practices encountered during its oversight activities and completed a study, "Safeguards and Security Technology Assessment," in October 1993, that identified various ways to reduce protective force manpower needs.

All of the sites we visited were evaluating ways to reduce the safeguards and security costs. For example, the Nevada Operations Office reported a 14 percent reduction in security costs resulting from a 1989 comprehensive budget review. The Hanford site's dedicated Security Transition Program Office, established in 1992, is frequently cited for its innovative realignment of security programs leading to long-range benefits. Overall, the various sites had compiled a long list of specific cost-cutting measures that they were pursuing.

However, our audit showed that opportunities exist for further reducing costs. Some sites did not adequately consider cost effectiveness when upgrading security systems, establishing operating practices, mandating exercise programs, or selecting supplies and equipment. As a result, costs of security at most sites had grown beyond the costs incurred when the Department was in full production mode. For example:

- o The Department needed to reassess the justification for two ongoing projects to upgrade security that were expected to cost about \$62 million to complete. One of

these projects that had already cost about \$20 million was subsequently suspended by Defense Programs and was waiting approval from Security Affairs for cancellation.

- o Operating efficiencies were possible by modifying current practices based on comparisons between sites with like circumstances. Costly practices that should be reviewed included "built-in" overtime, excessive pay rates for unarmed officers, time allowances to change clothing and draw equipment prior to work shifts, decentralized protective force units, and law enforcement functions that could be transferred to local authorities.
- o The Department requires armed officers to participate in a paid exercise program so that they can meet physical qualification standards. Costs to support the physical fitness program at the 10 sites visited varied significantly and ranged from under \$1,000 annually per officer to over \$5,000 annually per officer for participation in the program.
- o The Department's contractors were buying different types and brands of supplies and equipment rather than buying suitable but less costly items from the Department of Defense. We estimate that annual savings of \$2.5 million was possible by standardization at the sites visited. Standardizing weapons would yield additional benefits by reducing training and maintenance costs.

Some of the changes we recommended require modification of union agreements. We recognize that this is a difficult task but believe this is necessary because of current labor costs. For example, at one site armed officers averaged \$59,000 a year, 15 percent earned \$70,000, and a few made more than \$93,000 (\$70,000 of which was overtime). Officers were routinely paid overtime when they worked less than a 40-hour week.

We believe that the inefficiencies resulting from the limited and inconsistent safeguards and security guidance provided by Headquarters program offices and the Office of Security Affairs constitutes an internal control weakness that management should consider when preparing the yearend assurance memorandum on internal controls.

While the recommendations in this report are primarily addressed to the Office of Security Affairs, effective implementation is dependent on the cooperation of security officials in the Program Offices for Defense Programs and Environmental Restoration and Waste Management, as they are responsible for executing the safeguards and security programs at

their sites. Overall, the Department's efforts to provide safeguards and security in an efficient and cost-effective manner appear to be achieving the desired results. The Office of Security Affairs advised that the Fiscal Year 1995 Congressional Budget Request was reduced to \$933 million, a reduction of approximately 17 percent compared to Fiscal Year 1992. Part II of this report provides details on our findings and recommendations. Part III includes detailed management and auditor comments.

PART II

FINDINGS AND RECOMMENDATIONS

1. Physical Security at Nuclear Sites

FINDING

Safeguards and security policies require appropriate and cost-effective physical security at nuclear sites. Our audit found that physical security was greater than necessary at some sites where weapons activity had significantly decreased. Another site gave limited consideration to cost effectiveness in deciding how to upgrade its security system. These conditions occurred because: (1) ongoing projects were not promptly reassessed when missions changed and (2) levels of protection were not determined in a graded manner that considered the attractiveness of the material being protected. Security costs at two sites could be reduced by reassessing ongoing security upgrades that were expected to cost about \$62 million to complete. A third site could save as much as \$5 million annually if target attractiveness was properly considered.

RECOMMENDATIONS

We recommend that the Director, Office of Security Affairs:

1. Review ongoing and planned upgrades to determine their necessity under changing conditions and reassess the need for current levels of security at the sites.
2. Ensure selection of the most cost-effective system upgrades to meet the changing needs.
3. Ensure that graded physical protection guidance to differentiate protection requirements for Category I and Category II quantities of nuclear material, and attractiveness levels of Category I quantities of weapons, components, metals, and oxides/mixtures are included when implementing recommendations 1 and 2.

MANAGEMENT REACTION

The Director of Security Affairs agreed with the recommendations. Detailed management and auditor comments are included in Part III.

DETAILS OF FINDING

SECURITY REQUIREMENTS

Department Order 5630.11A, Safeguards and Security Program, establishes the policies and responsibilities for the safeguards and security program. The program requires the effective and efficient protection of Departmental interests against a wide range of threats that includes the theft or diversion of special nuclear material, industrial and radiological sabotage, espionage, loss or theft of classified matter or Government property, and other hostile acts that may cause unacceptable adverse impacts on national security, or on the health and safety of employees, the public or the environment. The order provides that levels of security protection at the Departmental sites will be graded according to the potential threats.

The Department, through site experts, determines the physical security level appropriate for the protection of nuclear material. Key aspects of the security program are risk, consequence, and current protection level. A site must first identify the level of risk acceptable to the Department. The acceptance of some level of risk is inherent in any activity, but it is the Department's policy to accept a low risk at its facilities.

The site identifies the material at risk and assigns it a consequence value based on its attractiveness. The valuing process considers the quantity of material present and the degree of processing and handling required to convert the material to a nuclear explosive device. The value, therefore, expresses the consequence of the material's release. The closer the material is to being a nuclear weapon and the more of the material that is present, the higher the value it is given, i.e., the value for a nuclear device would be significantly higher than the value for low-level waste. The less processing required, the higher the attractiveness of the material. A higher valued, more attractive target, then, would need greater protection than a lower valued, less attractive target.

The site determines, through the conduct of vulnerability assessments and performance tests, the current level of protection available at the site. This, in combination with the assigned consequence value and the probability of occurrence, defines the current risk level. If this risk level is unacceptable, security system upgrades must be devised to reduce risk to an acceptable level.

CURRENT PHYSICAL SECURITY LEVELS

The Department's goal is to protect its assets in a graded manner so that the highest levels of protection are provided to the top priority assets, which include nuclear weapons and devices. However, the need for ongoing and planned projects was not promptly reassessed when missions changed and levels of protection were not determined in a graded manner that considered the attractiveness of the material being protected.

Consequently, physical security at some sites where weapons activity had significantly decreased was greater than needed. Also, the most cost-effective system was not always selected when sites upgraded their physical security systems.

Reassessments When Missions Change

A \$71 million project to install Perimeter Intrusion Detection Alarm Systems (PIDAS) at two facilities at Savannah River may not be needed. The systems were approved when both facilities were producing nuclear materials, however, one of the facilities was already shut down and the other was expected to be shut down by the time the systems were installed. Also, tests performed by onsite security officials showed that existing security measures could be expected to defeat an adversary at all levels. At the time of our audit, about \$20 million had already been spent to support the project.

The Office of Defense Programs in Headquarters requested that Savannah River review the proposed systems with a view towards canceling the project. Based on its review, Savannah River concluded that the project was not necessary and requested an exception to the requirement for the PIDAS from Security Affairs. The Defense Programs Office supported the request by suspending the project in late 1993, and upon approval by the Office of Security Affairs, will cancel the project. At the conclusion of our audit, approval from the Office of Security Affairs had not been received.

Another planned PIDAS upgrade that may not be necessary was at the Idaho Chemical Processing Plant. The Office of Environmental Restoration and Waste Management examined the rationale used to support the decision to build two PIDAS. They discovered in one case that the existing security system provided sufficient detection, interruption, and neutralization of adversaries. An evaluation of options did not consider cost to be a critical factor although the facilities mission had changed from operation to long-term storage. The evaluation concluded that a PIDAS should be constructed to protect the material stored

at Idaho. (The second security system was still being evaluated at the time of our audit.) If the protection system in Idaho is determined to be effective without the two PIDAS and alarm systems, and Security Affairs grants the exemption, protection costs could be reduced by approximately \$11 million.

Target Attractiveness Levels and Consequence Values

While in production in 1985, the security budget of the K-25 complex in Oak Ridge, Tennessee was \$4 million compared with \$8 million today. We found that the K-25 facility had levels of protection that appeared to be questionable in light of its low level of attractiveness as a target. The complex contained several gaseous diffusion plants and a centrifuge facility, all of which had been inactive for several years. Parts of the K-25 complex were taken out of production in the mid-1960s and all production ceased in 1987. The K-25 complex contained relatively large quantities of nuclear material, but in the form of mostly low grade material that was spread thinly throughout the interior of the equipment, and contained in hundreds of miles of pipe lines. Because of the obvious difficulties associated with a theft or sabotage of this material, the desirability of the K-25 plant as a target is questionable.

The Office of Environmental Restoration and Waste Management, who had responsibility over the facility, took the position that the attractiveness level of the special nuclear material in K-25 was too low to require a costly security assessment. However, the Office of Security Affairs did not agree, stating that the attractiveness level was determined only by the physical and chemical properties of the material, not location accessibility. A subsequent review by the Office of Environmental Restoration and Waste Management concluded that it is not credible to recover a significant quantity of nuclear material; therefore, an assessment was not needed and no funds should be expended for an assessment. As an alternative, the Office of Environmental Restoration and Waste Management proposed the removal of four key pieces of equipment that contained the greatest concentrations of nuclear material. This would allow a lower classification for the facility and significantly reduce the cost of protection. Departmental security officials estimated that security costs could be reduced by about \$5 million annually if the material is removed. This matter was currently under consideration by the K-25 contractor and the Operations Office both of whom have discussed various options with the Office of Security Affairs. We were advised that changes in protection measures were about to occur.

REASONS FOR SECURITY MEASURES

Facilities had more elaborate security systems than necessary because levels of protection were not always determined in a graded manner and cost effectiveness of security systems was

not adequately considered. Field sites did not have the flexibility to adjust to reflect site-specific conditions. Adequate emphasis was not given to the cost effectiveness of system upgrade alternatives and the least costly option that provided adequate security was not selected. In addition, current physical protection requirements did not provide graded levels of protection for different attractiveness levels of nuclear material.

Nuclear materials are categorized by attractiveness levels A through D, but protection requirements for the various levels are not spelled out. Department of Energy Order 5632.2A, Physical Protection of Special Nuclear Material and Vital Equipment, does not differentiate between the consequence values for Category I quantities of Level A nuclear materials (assembled weapons), Level B (components and recastable metal), and Level C (carbides, oxides, etc.). Also, the difference in consequence values for Category I and Category II quantities of nuclear materials is minimal. Because the same or similar level of protection was required for different consequences, security resources were devoted to targets without adequate consideration of the attractiveness of the materials being protected.

BENEFITS OF ALTERNATIVE SECURITY MEASURES

In a period of diminishing governmental resources, it is important that operations offices, safeguards and security officials, and program officials work together to ensure that safeguard and security costs are acceptable in light of the new budgetary realities within the Department. The examples cited in the report show that security costs could be reduced by about \$62 million. Canceling the Savannah River project would result in a savings of about \$51 million, \$11 million potentially could be saved by selecting less expensive options in Idaho, and reduction of security levels at K-25 could result in significant annual savings.

2. Operational Efficiency

FINDING

The Department's Safeguards and Security Program requires effective and efficient protection of nuclear materials, classified matter, and property. While field organizations recently have taken various actions to reduce protective force costs, opportunities exist to further increase operational efficiency and reduce costs. Practices existed at field sites such as work schedules that included "built-in" overtime, excessive pay rates for unarmed officers, time allowances to change clothing and draw equipment prior to work shifts, decentralized protective force units, and law enforcement functions that could be transferred to local authorities. These practices existed because managers at field sites had limited visibility over union agreements at other sites to make comparisons and determine the reasonableness of their union agreement. Further, Headquarters guidance did not ensure consistency between union agreements. Revision of these practices at the 10 sites visited could result in cost savings of over \$14 million a year.

RECOMMENDATIONS

We recommend that the Director, Office of Security Affairs, develop the necessary policy guidance, identify the Departmental elements responsible for implementation, and monitor the progress of the following recommended actions.

1. Increase management oversight by reviewing Departmental orders and proposed union agreements to preclude costly practices and ensure that Departmental objectives are met.
2. Direct operations offices to implement, as soon as practicable, policies to:
 - a. Pay overtime only for work in excess of 40 hours a week rather than 8 hours a day.
 - b. Adjust pay rates for unarmed officers to levels commensurate with their duties.
 - c. Require that protective force personnel report for duty equipped and in uniform. Discontinue payment for time to change clothing and draw equipment.
 - d. Consolidate protective force units where feasible.

- e. Transfer, where possible, law enforcement duties from contractor personnel to local law enforcement agencies.

MANAGEMENT REACTION

The Director of Security Affairs agreed with the recommendations. A summary of management and auditor comments is contained in Part III of this report.

DETAILS OF FINDING

REQUIREMENTS FOR OPERATIONAL EFFICIENCY

Department Order 5630.11A requires the formulation of policies, procedures, and plans to ensure effective and efficient protection of nuclear materials, classified matter, property and facilities. Subpart 970.22 of the Department's Acquisition Regulation requires a review of labor expenses under management and operating contracts as part of Departmental responsibility for assuring judicious expenditure of public funds. The regulation also requires that wages, salaries, and fringe benefits be administered in a manner to adapt normal industry practices and conditions to the contract work and to provide for appropriate Departmental review.

PROTECTIVE FORCE ACTIVITY

Field organizations have recently taken a number of actions to reduce protective force costs. Actions taken include the consolidation of special nuclear material and classified documents, reduction of security requirements for certain buildings, elimination of guard posts, reduction of operating hours of guard posts, and disarming of security police officers. Nonetheless, opportunities exist to further increase operational efficiency and reduce costs.

Labor costs for the contractor protective forces, particularly overtime pay, represented a significant portion of the Safeguards and Security Program costs. Overtime pay as a percentage of direct labor costs ranged from 16 percent to 56 percent at the sites visited. In 1992, security police officers at one site earned average gross wages of about \$59,000, 15 percent earned more than \$70,000, and a few earned as much as \$93,000, of which about \$70,000 was for overtime. Much of the salary cost can be attributed to work schedules with "built-in" overtime, excessive pay rates for unarmed officers, and time allowances for shift changes. Some of the sites visited, however, were more effective in controlling labor costs than others. Examples of some of these practices are discussed in the following paragraphs.

Work Schedules With "Built-In" Overtime

Union agreements at all of the sites visited, except Savannah River, provided for payment of overtime at time-and-a-half rates for all hours worked in excess of 8 hours a day and 40 hours a week. Savannah River armed officers worked 12-hour shifts but were paid overtime only for hours worked in excess of 40 hours a week. At those sites where the basic work shift was 12 hours a day and overtime was paid for time worked over 8 hours, there was "built-in" overtime of at least 4 hours a day. Thus, a normal 48-hour workweek (four 12-hour workdays) at these sites consisted of 32 hours paid at basic pay rates and 16 hours paid at overtime rates. By comparison, a typical 48-hour week at Savannah River consisted of 40 hours at basic pay rates and 8 hours at overtime rates. In addition, personnel at sites on a 12-hour shift typically worked 4 days on and 4 days off, which results in alternate 48-hour and 36-hour weeks (three 12-hour workdays). At three of the sites visited, the 36-hour week consisted of 24 hours at basic pay rates and 12 hours at overtime rates. At Savannah River, however, no overtime was paid during the 36-hour week.

If sites adopted the Savannah River policy of paying overtime only for work in excess of 40 hours a week, we estimated that about \$11 million could be saved annually at the four sites we reviewed that worked 12-hour shifts. The following chart shows the potential cost reductions at those sites if overtime was paid only for work over 40 hours:

<u>"Built In" Overtime (OT) Costs</u>				
	Type of OT Payment	<u>Total Site Overtime Costs</u>		Possible Savings
		Actual	Proposed	
NEVADA	over 8/day	\$3,861,312	\$1,930,656	\$1,930,656
ROCKY FLATS	over 8/day	\$6,873,697	\$1,444,628	4,874,069
PANTEX	over 8/day	\$5,846,575	\$1,670,450	4,176,125
SAVANNAH RIVER	over 40/week	\$3,831,984	\$3,831,984	\$0
				<u>\$10,980,850</u>

The preceding chart excludes sites operating on 8-hour shifts because their work schedules do not include "built-in" overtime costs. We were advised, however, that Y-12 and K-25 sites at Oak Ridge were considering a change to 12-hour shifts.

Pay Rates For Unarmed Security Officers

The Service Contract Act of 1965 states that there should be a relationship between wage rates and job classifications. The latter should be based on the skill required and the duties performed. We found, at the sites visited, that the duties of armed and unarmed officers differed significantly, but their pay rates were almost the same. Unlike unarmed officers, armed officers must be (1) knowledgeable of, and able to apply, Departmental policy on the use of deadly force and limited arrest authority; (2) proficient in the use and care of weapons; (3) familiar with basic procedures and elements of investigation; and (4) proficient in dealing with armed adversaries. Despite these differences in job requirements, the pay rates at most of the sites visited differed by only about 50 to 60 cents per hour or about 3 percent.

In contrast, Savannah River paid its unarmed officers about 20 percent less than its armed officers. Similarly, commercial nuclear power plants licensed by the Nuclear Regulatory Commission paid their unarmed officers about 20 to 25 percent less than armed officers. We were advised that Los Alamos National Laboratory recently negotiated a \$1.50 per hour pay differential for unarmed officers. Sandia National Laboratory also planned to negotiate a similar pay differential for several armed positions that it planned to convert to unarmed positions.

Although field sites had relatively few unarmed officers, the number was increasing. During our review, 40 officers were disarmed at the Oak Ridge Operations Office, 113 at one area of the Savannah River site, and 12 at the Albuquerque Operations Office.

We recognize that the revision of pay rates requires renegotiation of union agreements and therefore must be accomplished incrementally over a period of time as union agreements are renegotiated. However, central guidance is needed from Department Headquarters to establish appropriate pay differentials and advise the field activities of the need to ensure that pay rates for unarmed officers adequately consider job requirements.

Shift Change Procedures

Some sites paid armed officers for time needed to change into uniforms and draw their weapons and other equipment prior to shift changes. The amount of time allowed for this purpose varied from site to site. At the 10 sites included in our review, this paid time ranged from no time at all to as much as 42 minutes. Four sites gave their officers time to prepare for work, while six sites required their officers to report ready to work. Some sites paid overtime rates for drawing weapons and other equipment and for changing into uniforms. At Lawrence

Livermore National Laboratory, armed officers were not paid for changing clothing and drawing equipment; however, Livermore was currently considering revising its policy to pay the officers up to 12 minutes for this purpose. Payment for time to change clothing and draw equipment cost approximately \$1.7 million per year at the sites visited.

Consolidation of Protective Force Units

We noted several instances where separate protective force units operated within close proximity. The audit showed that consolidation of these units would result in operating efficiencies. Oak Ridge had four separate protective force units, each with its own manager, administrative support staff, armory, and ammunition storage site. Similarly, Sandia National Laboratory and the Albuquerque Operations Office had separate protective force units although they were collocated on Kirtland Air Force Base. Potential opportunities for consolidation also exist at Idaho, where there were three protective force units; Livermore, where both the Lawrence Livermore National Laboratory and Sandia National Laboratory, California, had protective force units separated only by a street; and in Nevada, where the protective force unit at Tonopah Test Range operated separately from the Nevada Operations Office.

Oak Ridge initiated the consolidation of its protective force units in April 1993. Although precise cost savings resulting from the consolidation were not determined, Oak Ridge expected to reduce managerial and administrative staffing levels by about 11 percent and substantially reduce space and equipment requirements. The four protective force managers were to be replaced with one manager. Administrative support for training, supply, and maintenance functions were expected to yield similar cost reductions. In addition to reducing costs, the consolidation should enhance operational efficiency through increased standardization, improved communications, and reduced paperwork.

The consolidation of protective force units at Oak Ridge represents a significant change. Some of the units were represented by different unions and were accustomed to different operating policies and procedures. Nevertheless, the Department decided that the benefits clearly outweighed the institutional barriers that needed to be overcome. The potential consolidations of protective force units at Kirtland Air Force Base, Idaho, Livermore, and in Nevada involve the crossing of Departmental and corporate organizational lines. However, the experiences at Oak Ridge confirms that consolidation of protective force units is an achievable objective.

Local Law Enforcement Functions

Most field sites have agreements with various local law enforcement agencies such as police departments, state highway patrols, and sheriffs' offices. These agreements generally provide for assistance in emergencies, loan of special equipment, use of facilities, and specialized training.

In addition to these agreements, a few sites have initiated actions to transfer routine law enforcement responsibilities to local law enforcement agencies. The Nevada Operations Office had transferred law enforcement responsibilities such as traffic enforcement, criminal investigations, and crowd control to the Nye County Sheriff. Hanford transferred law enforcement responsibilities to the Benton County Sheriff on April 28, 1993. Hanford had 10 officers assigned to these functions. Management at Hanford estimated net savings to total about \$200,000 annually. Hanford also eliminated their K-9 capability and donated their dogs to the local police with the understanding that the local agencies will provide the dogs as needed. Rocky Flats also eliminated their K-9 capability.

During our review, we found opportunities for similar cost reductions at other locations. For example, Savannah River had a staff of 98 officers in its law enforcement and K-9 sections. The security force could be reduced by about 40 officers if Savannah River discontinued patrol of public roads. The projected savings would amount to over \$1 million annually. We also noted that Lawrence Livermore spent about \$300,000 annually for traffic safety enforcement and a K-9 division. Field offices and their contractors needed to explore the feasibility of transferring similar functions at other Department of Energy sites to local law enforcement agencies. We recognize that some of the savings could be offset by fees charged by local law enforcement agencies.

REASONS FOR PROTECTIVE FORCE PRACTICES

The lack of management review and guidance by the Department has resulted in costly protective force practices. About 5,600 officers were provided under contracts that were administered primarily through the Department's Operations Offices, with input from Headquarters program offices. Although the operations offices review and approve union agreements, they did not have the necessary visibility over union agreements at other sites to determine if provisions of their union agreements were comparable to other sites. Because the operations offices were independently negotiating union agreements, varying policies were put in place at the sites.

While we recognize the difficulties associated with merging the Department's interest in numerous union agreements, we concluded that cost efficiencies were possible if (1) comparative

information was made available so that Department managers at field sites could compare their local situation with other sites that operated under like circumstances and (2) guidance was available to ensure relative consistency in the various union agreements.

IMPACT OF PROTECTIVE FORCE PRACTICES

We estimated that cost savings of about \$14.2 million were possible at the sites included in the audit. The savings, by category, are shown in the following table. We did not quantify potential cost savings related to our findings on unarmed officers and consolidation.

SITE	'Built-In' Overtime	Shift Change	Local Law	TOTAL
Hanford			\$2	\$2
Livermore		\$2	\$3	\$5
Los Alamos				
K-25 Plant				
Nevada	\$1.0			\$1.0
Pantex	\$4.2	\$5		\$4.7
Rocky Flats	\$4.0	\$7		\$5.6
Sandia		\$3		\$3
Savannah			\$1.0	\$1.0
Y-12 Plant				
Totals	\$11.0	\$1.7	\$1.5	\$14.2

* \$ in millions

Many of the practices discussed have been in effect for several years. In many cases they are incorporated in union agreements. We acknowledge that eliminating or reducing benefits associated with these agreements will be a difficult task. Some changes will have to be implemented over a period of time as union agreements are renegotiated. However, in view of the Department's changing mission and budgetary constraints, this may be the opportune time to make policy decisions designed to reduce protective force costs. Appropriate guidance must be directed to operations offices and other field officials who have day-to-day responsibility for these functions.

3. Physical Exercise Program

FINDING

Department of Energy safeguards and security policies require appropriate and cost-effective security protection programs at all Departmental sites. Current Department policy makes participation in a fitness maintenance program mandatory for armed security officers and compensates them to participate in a physical exercise program. However, the Department's practice of paying armed security officers to exercise in a physical fitness program was not cost effective. Costs to support the physical fitness program at the 10 sites visited varied significantly. For example, one site paid under \$1,000 per officer while another site paid over \$5,000 per officer to participate in the physical fitness program. In addition, some sites paid annual allowances for exercise clothing. These conditions existed because the Department had not determined the most cost-effective approach to implementing its physical exercise program. We estimated that the program cost the Department about \$15 million in Fiscal Year 1992, and if actions were taken to reduce or eliminate physical fitness program costs, significant savings to the Department could be realized.

RECOMMENDATION

We recommend that the Director, Office of Security Affairs, in coordination with each field organization, evaluate the effectiveness and reasonableness of the cost of physical fitness, and the overall contribution of the physical exercise program to physical security. This evaluation should consider policy changes to reduce or eliminate, in a consistent manner:

1. The number of physical fitness exercise hours required per 7 day period.
2. Paying overtime when officers exercise.
3. Paid annual allowances for exercise clothing.

MANAGEMENT REACTION

The Director of Security Affairs agreed with the recommendation. A summary of management and auditor comments is included in Part III.

DETAILS OF FINDING

REQUIREMENTS FOR PHYSICAL EXERCISE PROGRAM

Department Order 5630.11A requires the formulation of policies, procedures, and plans to ensure effective and efficient protection of nuclear materials, classified matter, property, and facilities. Department Order 5633.2, Control and Accountability of Nuclear Materials Responsibilities and Authorities, makes the heads of field organizations responsible for assuring that protection of each site is cost effective.

The Department's Medical and Fitness Implementation Guide, dated March 1991 provides guidance for executing individual site physical fitness programs. The guide is intended to assist the sites in implementing a continuing physical fitness training program and directs that the program at each site be practical and functional. The purpose of the physical fitness program is to ensure that security officers maintain the requisite physical fitness for effective job performance and to enable them to pass the annual physical fitness requalification test without causing physical injury.

Subpart 970.22 of the Department's Acquisition Regulation requires a review of labor expenses as part of Departmental responsibility for assuring judicious expenditure of public funds. The regulation also requires that wages, salaries, and fringe benefits be administered in a manner to adapt normal industry practices and to provide for appropriate Departmental review.

PHYSICAL FITNESS EXERCISE PROGRAM

At the sites included in our review, we estimated that the Department was spending about \$10 million annually to compensate security officers to exercise in a physical fitness program. Further, Department contractors adopted widely varying programs for compensating security officers to exercise. In addition, some sites paid annual allowances for exercise clothing.

Cost of the Physical Fitness Program

Costs to support the physical fitness program at the 10 sites visited differed significantly. These costs ranged from under \$1,000 to over \$5,000 per security police officer. We found that some sites hired additional personnel to relieve armed security officers from duty so that they could exercise during normal work hours, some sites paid overtime at basic rates, and others paid them at overtime rates. For example, one site paid 2.4 hours overtime (at overtime rates) each week for unsupervised exercise at home. Another site paid for 1 hour of overtime (at basic pay rates) for self-certified, unsupervised exercise on

site. Most sites provided exercise facilities and instructors to supervise fitness training on site. Because of the remoteness of its guard posts, Nevada assigned 12 physical fitness instructors to provide supervision 24 hours a day at four locations. In addition, some sites paid annual allowances of \$70 to \$240 per officer to buy exercise clothing. The following chart illustrates the widely varying costs of the physical exercise program at the 10 sites.

Cost of Physical Fitness Program

Site	Number of Participating Personnel	Total Yearly Cost per Guard	Total Cost (1992)
Savannah River	890	\$991.88	\$882,769
Hanford	190	\$2,480.55	\$471,305
Pentex	379	\$2,794.43	\$1,059,087
Nevada	227	\$3,056.93	\$693,922
Los Alamos	376	\$3,404.24	\$1,279,993
Rocky Flats	407	\$3,707.03	\$1,508,759
Oak Ridge Y-12	485	\$3,852.71	\$1,868,566
Oak Ridge K-25	108	\$3,901.88	\$421,403
LLNL	193	\$4,508.43	\$870,126
Sandia (Albq)	147	\$5,047.35	\$741,960
			TOTAL: \$9,797,690

Program Implementation

Savannah River's exercise program had the lowest cost per officer because their officers were not required to exercise 3 out of 7 days. A Savannah River study showed that it would cost about \$5.8 million annually to implement a program that met all Departmental requirements, compared with about \$900,000 for their existing program. As a result, Savannah River implemented their program that requires security officers perform self-certified, unsupervised exercise 1 hour per week (2 half-hour sessions) for which they receive overtime pay at basic rates. Savannah River based their decision on:

- o Its physical exercise program maintains a 99 percent pass rate.

- o The annual cost of over \$5 million to meet all Departmental requirements in an attempt to achieve a 100 percent pass rate was not considered practical or justifiable during a period of increased congressional scrutiny over operating budgets.
- o Its Office of Chief Counsel indicated that no increased liability is incurred by exercising one hour per week offsite.

The Department's Strategic Petroleum Reserve armed security officers were not required to exercise and, therefore, were not paid, but still were required to meet the Department's fitness standards. Similarly, armed security officers at the Albuquerque Operations Office were not required to meet the physical standards and were not paid to exercise.

During our audit, we obtained information concerning normal industry practices at several different entities. For example, the Tennessee Valley Authority and other civilian nuclear power plants licensed by the Nuclear Regulatory Commission were also required to meet minimum physical requirements, but did not require structured exercise programs or compensate employees to exercise nor provide on-duty time for exercise. Nuclear Regulatory Commission licensees felt that a structured physical fitness program was too costly and that it was the individual's responsibility to stay fit in order to qualify for the job. Similarly, of the three police departments we contacted in the Washington, D.C. metropolitan area, all had minimum physical requirements (height, weight, health), but none paid police officers to exercise. In addition, we learned that two national private security companies that employ armed officers did not have structured physical fitness programs. Thus, when compared to normal industry practices, the Department's policy for compensating security officers for exercising appears more generous.

Methods to Reduce Costs

The Department could reduce costs of the physical exercise program. For example, field security officials at Pantex, Sandia, and Los Alamos indicated that because Security Police Officers I's and II's have limited response requirements and their duties are not physically taxing, they should not be required to meet physical fitness standards. While these defensive personnel would be encouraged to stay physically fit in order to meet medical requirements and perform their duties effectively, the reasonableness of compensation for their exercise program should be evaluated. In addition, since the

armed offensive Security Police Officers (SPO-III's) have the quick-response responsibilities, they should be required to meet physical fitness requirements. Due to the nature of their special response duties, in many cases, they are able to exercise while on duty without incurring any additional cost.

REASONS FOR PROGRAM VARIATIONS

The Department established the physical fitness qualification standards for protective force personnel in Subpart B of 10 CFR 1046. The creation of the Medical and Fitness Implementation Guide provided compensation for the participation of officers in a training program.

The policy of compensating armed officers to participate in the physical exercise program was implemented in 1985. When physical fitness standards were established, incumbent officers were required to participate in a physical fitness training program before taking the initial fitness test in order to avoid injuries. Because this initial, one-time training was mandatory, the officers were compensated for participating in the program. At that time, 10 CFR 1046 was unclear as to whether physical training after the initial qualification was mandatory. The Department subsequently revised the regulation so that beginning January 24, 1985, all armed officers were required to meet physical fitness standards both prior to initial assignment and annually thereafter. However, an evaluation of the cost effectiveness of this program had not been undertaken by the Department since its implementation.

COST EFFECTIVENESS

The Department could reduce their costs to support the physical fitness program by taking prompt action to identify costs that could be reduced or eliminated. The physical fitness program cost the Department about \$10 million in Fiscal Year 1992 at the sites included in our review. As our review only included 65 percent of the armed officers, we estimate that the total cost of this program to the Department was about \$15 million annually. If actions were taken to reduce or eliminate physical fitness program costs, significant savings to the Department could be realized. Without these actions, the Department will continue to support an exercise program that may not be cost effective.

4. Standardization of Supplies and Equipment

FINDING

Departmental policies require that protective forces purchase standardized supplies and equipment to optimize operational and financial benefits. Also, a Department of Energy task force recommended in December 1990 that standardized supplies and equipment be procured for use at its facilities. However, the Department had made limited progress procuring standard items and allowed its contractors to purchase different types and brands of supplies and equipment instead of acquiring suitable, less costly items from the Department of Defense. These practices continued because the Department had not identified and developed a standardized list of supplies and equipment that could be used by its protective forces. Instead, ad hoc working groups were evaluating about 100 items, such as flashlights, safety glasses, and disposable earplugs to select items for standardization. We estimated that savings of about \$2.5 million could be achieved at the sites visited by standardizing and buying items from the Department of Defense supply system. Standardizing weapons would also yield substantial benefits by reducing training, maintenance, and repair parts costs.

RECOMMENDATIONS

We recommend that the Director, Office of Security Affairs:

1. Identify Department of Defense equipment that will meet Department of Energy protective force requirements and adopt the items for Departmental use.
2. Provide guidance to all field activities on procedures for requisitioning Department of Defense items.
3. Place a higher priority on standardization by:
 - a. Adequately staffing evaluation groups.
 - b. Establishing and enforcing milestones for completion of evaluations.
4. Develop a standardized list of weapons for acquisition by field activities. In the interim, have field activities hold purchases of weapons to only what is needed to meet immediate requirements.

MANAGEMENT REACTION

The Director of Security Affairs agreed with the recommendations. A summary of management and auditor comments is contained in Part III of this report.

DETAILS OF FINDING

STANDARDIZATION REQUIREMENTS

Department of Energy Order 5630.17, Safeguards and Security Standardization Program, provides policies, procedures, responsibilities, and authority for the safeguards and security standardization program. It requires the procurement of the most effective and efficient safeguards and security equipment and systems. The Department's standardization program prescribes that such equipment will be standardized and commonly procured to achieve the maximum cost savings.

CURRENT PROGRESS

In December 1990, the Secretary's Safeguards and Security Task Force recommended that an aggressive program be initiated to standardize protective forces equipment. A steering committee was established in April 1991 to address standardization and common procurement of equipment and supplies. While our audit showed that some progress had been made in the standardization program, most standardization evaluations were ongoing or had not started. The steering committee reviewed several hundred candidate items and a list of about 100 items was selected for ad hoc work group evaluation and possible standardization. Items studied included ammunition, dress uniforms, safety glasses, mace, flashlights, and disposable earplugs. In December 1992, the first standardization action was completed and the common procurement of ammunition was initiated. Specifications are currently being developed for other items. We found, however, that the Department's standardization efforts were not proceeding as expeditiously as the task force had recommended.

Equipment Available From the Department of Defense

We selected items that Department of Energy sites purchased from commercial sources in 1992 and compared the prices they paid with prices of similar standard items available from the Department of Defense supply system. The comparisons showed that significant savings could be achieved. For example:

- o Rocky Flats bought cellular telephones for \$1,895 each when they could have obtained the same phones for \$1,000 from the Department of Defense. They also bought evidence bags for \$25.00 a package when the Department of Defense had them available for \$7.19.
- o The Nevada Operations Office procured night vision rifle sights for \$8,800 each when comparable ones were available for \$2,521 from the Department of Defense.
- o Hanford bought men's walking boots for \$89.89 a pair when the Department of Defense had comparable boots for \$58.75.

Savings could also be achieved by adopting military specifications for equipment that will satisfy Department of Energy needs. Everyday uniforms are a good example. Pantex procured uniforms from the Department of Defense for prices about 50 percent lower than commercial prices.

Standardization of Weapons

The Secretary's Safeguards and Security Task Force also found that the standardization of weapons for the protective forces would be beneficial. Items identified as candidates for standardization were handguns, rifles, shotguns, and machine guns. The 10 sites we visited had inventories of a wide variety of handguns and rifles. Specifically, we noted 23 different handguns and 18 different rifles as shown in the following chart.

Different Types and Brands of Firearms Used at Sites Visited	
<u>Handguns</u>	<u>Rifles</u>
S&W .38 Revolver-4"	Colt .223 M-16 A2
S&W .38 Revolver-6"	Remington .308 Sniper
S&W .357 Revolver-686	H&K .308 Sniper
S&W .357 Revolver-19	Colt 5.56mm M-16 A1
S&W .357 Revolver-586	Colt 5.56mm M-16 A2
Sig Sauer .45	Fulton M-16 A2
S&W .38 Revolver-2"	Fulton M1A
Derringer .38	Winchester .300 M-70
Targa .25	Kluge .308
H&K 9mm HP-7 M8	Colt Carbine M-16 A1
S&W .22 K-22	H&K .223 33-A3
Davis Service .38 M15	McMillan .308 86
Handgun Auto .25 F.I.E. NF	Jager .22
Titan Auto .25 HF	Browning M30 30 Cal
Berretta 9mm 92SB	Colt M-14 .308
Clark 9mm Automatic	Marlmount .308 cal M-60
Ruger 357 Magnum	Winchester .243 cal
Sig Sauer 9mm	Winchester 30.06 cal
Colt .45 MK-80	
Colt .38 Special	
S&W .38 Special	
S&W 469 9mm	
S&W 5906 9mm	

Action to standardize weapons was needed because the selection of one type of handgun and one type of shotgun or rifle would reduce training and maintenance costs. Some sites had taken initiatives towards standardization of weapons within their own sites. Y-12 Plant in Oak Ridge had eliminated shotguns from its arsenal of weapons. Three sites had selected different handguns as a single standard weapon. Individual sites concluded that there were both positive acquisition and maintenance cost benefits as well as training benefits associated with standardizing their weapons inventory. To gain maximum benefits, we believe the standardization concept needs to be adopted Departmentwide.

OBSTACLES TO STANDARDIZATION

The Department had not identified and developed a list of standard supplies and equipment that would be suitable for Departmental needs. Instead, working groups were formed to evaluate certain items for standardization. Progress to standardize supplies and equipment was slowed by the concept that the Department's security forces were unique, by the ad hoc nature of steering committee and working groups, and by the need for specific direction by Headquarters. Also, personal preferences by security officers and the lack of milestones identified for completing standardization evaluations permitted the Department's contractors to continue to purchase nonstandard supplies and equipment from commercial vendors.

In contrast, the United States Air Force's Security Police Equipment Management Activity evaluates commercial and Government-developed equipment for security police use. It evaluates the equipment under actual operating conditions and provides the results to Air Force and other Department of Defense security police units. These evaluations serve as a basis for standardizing supplies and equipment in the Department of Defense. Since Department of Energy protective forces have comparable missions, we believe the Department should adopt the equipment used by Department of Defense security police organizations unless it is demonstrated that unique situations make these items unsuitable for use by the Department's protective forces.

BENEFITS OF STANDARDIZATION

While the extent to which Departmental supply requirements can be satisfied by the Department of Defense has yet to be determined, the examples cited in this report suggest that substantial savings can be realized. The 10 sites we visited spent over \$5 million in Fiscal Year 1992 for supplies and equipment that potentially could be standardized. If standardization results in an average 50 percent reduction in costs, these sites could reduce annual supplies and equipment

expenditures by an estimated \$2.5 million. Additional savings should be available at other sites not included in our review.

Standardization of weapons, radios, uniforms, and other equipment will yield even greater savings in reduced training, maintenance, and spare parts stockage costs. In addition, the Department will have greater flexibility in temporarily reassigning protective forces to other sites in case of emergencies because the personnel will be familiar with the standard equipment.

PART III

MANAGEMENT AND AUDITOR COMMENTS

The Office of Security Affairs generally agreed with our findings and recommendations. The Deputy Assistant Secretary for Security Evaluations for the Office of Environment, Safety, and Health, and the Program Offices for Defense Programs and Environmental Restoration and Waste Management also agreed with the report.

In addition, the Director of Security Affairs pointed out that, since the Office of Security Affairs is a policy office, it needs to work with other Headquarters staff elements to promote any changes in the Department's security community. In responding to this report, the Program Offices for Defense Programs and Environmental Restoration and Waste Management, who have responsibility for safeguards and security funding and program execution at nuclear sites, promised their support in bringing about appropriate changes in security policies. Overall, the Department's effort to provide safeguards and security in an efficient and cost-effective manner appears to be achieving the desired results. The Office of Security Affairs reported that the Fiscal Year 1995 Congressional Budget Request was reduced to \$933 million, a reduction of about 17 percent compared to Fiscal Year 1992.

FINDING 1. Physical Security at Nuclear Sites

We recommend that the Director, Office of Security Affairs:

Recommendation 1

Review ongoing and planned upgrades to determine their necessity under changing conditions and reassess the need for current levels of security at the sites.

Management Comments. Management agreed and added that the Office of Security Affairs is currently participating in a Secretarial Task Force aimed at Departmental overhead costs and specifically the reduction of safeguards and security costs. Major upgrades are submitted through the programs and are reviewed by Security Affairs for adequacy and effectiveness.

Auditor Comments. Management's actions are responsive to our recommendation.

Recommendation 2

Ensure selection of the most cost-effective system upgrades to meet the changing needs.

Management Comments. Management agreed and stated that DOE Order 5630.14A currently requires a cost effectiveness evaluation and vulnerability analysis to be conducted for safeguards and security planning. Security Affairs has been and continues to be available to assist field organizations in determining and selecting adequate and cost-effective safeguards and security upgrades. The Director, Office of Safeguards and Security, will correspond with the Operations Office Managers, offering assistance for any planned security upgrades. However, the ultimate decision making authority for selection of any system upgrades is vested in the site manager.

Auditor Comments. Management's action to assist field organizations in determining and selecting cost-effective security upgrades and offer assistance to Operations Office Managers for planned security upgrades is responsive to our recommendation.

Recommendation 3

Ensure that graded physical protection guidance to differentiate protection requirements for Category I and Category II quantities of nuclear material, and attractiveness levels of Category I quantities of weapons, components, metals, and oxides/mixtures are included when implementing recommendations 1 and 2.

Management Comments. Management agreed and stated that this recommendation is included with the actions of Recommendation 1 and 2. Management added that the present protection requirements are currently graded by Category and attractiveness levels within categories. Guidance has been used since 1985, the date of the original master Safeguards and Security Agreement. Consequence values were published in the 1989 "Site Safeguards and Security Plan Preparation Guide" and the 1993 "Format and Content Guide for Site Safeguards and Security Plans." These consequence values range from 0.1 to 1.0 and are differentiated along the scale for various categories and attractiveness levels of materials. These values form the basis for safeguards and security protection programs as well as the determination of appropriate safeguards and security upgrades. All line item construction projects are or should be based upon the completion of a vulnerability assessment which is, in turn, based upon the consequence values. In general, the greater protection requirements are levied on those materials capable of use or fabrication as nuclear weapons.

Auditor Comments. Management's comments are considered responsive to our recommendation.

FINDING 2. Operational Efficiency

We recommend that the Director, Office of Security Affairs, develop the necessary policy guidance, identify the Departmental elements responsible for implementation, and monitor the progress of the following recommended actions.

Recommendation 1

Increase management oversight by reviewing Departmental orders and proposed union agreements to preclude costly practices and ensure that Departmental objectives are met.

Management Comments. The Director of Security Affairs agreed with the recommendation and stated that they will notify Operations Office Managers of the Inspector General's recommendation that Security Affairs become more involved in the review of protective force operations. Further, the Office of Security Affairs will recommend that the Operations Office Managers include Security Affairs in the review of proposed union agreements in order to provide consistent practices throughout the Department.

Auditor Comments. Management's comments are responsive to our recommendation.

Recommendation 2

Direct Operations Offices to implement, as soon as practicable, policies to:

- a. Pay overtime only for work in excess of 40 hours a week rather than 8 hours a day.
- b. Adjust pay rates for unarmed officers to levels commensurate with their duties.
- c. Require that protective force personnel report for duty equipped and in uniform. Discontinue payment for time to change clothing and draw equipment.
- d. Consolidate protective force units where feasible.
- e. Transfer, where possible, law enforcement duties from contractor personnel to local law enforcement agencies.

Management Comments. The Director of Security Affairs agreed with most of the recommendation and provided the following comments. Rather than "direct Operations Offices," the Office of Security Affairs will correspond with the Operations Office

Managers informing them of the Inspector General's recommendations that Security Affairs become more involved in the overview of protective force operations. Also, Security Affairs will recommend to the Operations Office Managers that proposed union agreements be reviewed by Security Affairs to provide consistent, cost-effective protective force operations throughout the Department. For Recommendation 2.c., Security Affairs felt that having protective forces personnel report for duty equipped and in uniform would not allow for supervisory inspection and standard police line up. Furthermore, having protective forces personnel report for duty equipped would also mean having to take protective force weapons offsite with the individuals. The Office of Security Affairs is not willing to place the Department at risk or assume the liability that could occur from the current wording of the recommendation.

Auditor Comments. Management's comments are considered responsive to our recommendation. However, we continue to believe that security police officers should be able to report for duty equipped and in uniform without taking their weapons offsite. The intent of Recommendation 2.c. was not that weapons should be taken offsite with the individuals. As previously discussed in the report, other site's security forces were able to report for duty fully equipped without having to take their weapons offsite and without being paid.

FINDING 3. Physical Exercise Program

Recommendations

We recommend that the Director, Office of Security Affairs, in coordination with each field organization, evaluate the effectiveness and reasonableness of the cost of physical fitness, and the overall contribution of the physical exercise program to physical security. This evaluation should consider policy changes to reduce or eliminate, in a consistent manner:

1. The number of physical fitness exercise hours required per 7 day period.
2. Paying overtime when officers exercise.
3. Paid annual allowances for exercise clothing.

Management Comments. Management agreed and stated the Office of Security Affairs will include the evaluation of the effectiveness, reasonableness of physical fitness cost, and the overall contribution of the physical exercise program to physical security in its Safeguards and Security Resource Reviews. Furthermore, we [SA] are prepared to establish a Quality Review Team composed of Departmental medical, labor relations, Inspector General, and Security Affairs personnel. This team would be chartered to evaluate, with respective Operations Offices, the

safeguards and security physical exercise program. It must be noted that those field elements that have a protective force tactical mission have stringent physical fitness requirements that must be adhered to.

Auditor Comments. Management's comments are considered responsive to our recommendation.

FINDING 4. Standardization of Supplies and Equipment

We recommend that the Director, Office of Security Affairs:

Recommendation 1

Identify Department of Defense equipment that will meet Department of Energy protective force requirements and adopt the items for Departmental use.

Management Comments. Management agreed and stated that this is an ongoing element of the current program.

Auditor Comments. Management's comments are considered responsive to our recommendation.

Recommendation 2

Provide guidance to all field activities on procedures for requisitioning Department of Defense items.

Management Comments. Management agreed with the recommendation and stated that this is already an element of the current program. Information bulletins have been and will continue to be issued to the field, transmitting Federal military specification references for procurement of items available.

Auditor Comments. Management comments are considered responsive to our recommendation.

Recommendation 3

Place a higher priority on standardization by:

- a. Adequately staffing evaluation groups.
- b. Establishing and enforcing milestones for completion of evaluations.

Management Comments. Management agreed and stated that the Office of Security Affairs will review the standardization program against the National Performance Review and will establish performance standards to be met for all types of equipment.

Auditor Comments. Management's comments are responsive to our recommendation.

Recommendation 4

Develop a standardized list of weapons for acquisition by field activities. In the interim, have field activities hold purchases of weapons to only what is needed to meet immediate requirements.

Management Comments. Management agreed with the recommendation and stated that the Office of Security Affairs will request the Operations Office Managers have Security Affairs review draft proposals of any large volume procurement of firearms for performance consistency. Any one-for-one replacement for existing weapons will not have to be reviewed by Security Affairs.

Auditor Comments. Management's comments are considered responsive to our recommendation.

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