

Safeguards and Security

Program Mission

The mission of the Office of Science (SC) Safeguards and Security program is to ensure appropriate levels of protection against: unauthorized access, theft, diversion, loss of custody or destruction of Department of Energy (DOE) assets and hostile acts that may cause adverse impacts on fundamental science, national security or the health and safety of DOE and contractor employees, the public or the environment. Each site has a tailored protection program as analyzed and defined in each site's Computer Security Program Plan (CSPP) or other appropriate plan. SC's Integrated Safeguards and Security Management (ISSM) strategy encompasses a graded approach to safeguards and security. ISSM will promote individual ownership and essential security performance at all Office of Science facilities. ISSM is not a standard, nor is it a new program; rather it is a set of principles and a formal methodology that is the basis of integrated management of security in all work practices at all levels by all DOE/SC employees. ISSM is intended to assist in weaving together existing programs into a "system" that has as its foundation personal responsibility, and including security in all work practices. This approach will enable each facility to design varying degrees of protection commensurate with the risks and consequences described with their facility-specific threat scenarios.

The following is a brief description of the types of activities performed:

Protective Forces

The Physical Protection Protective Forces activity provides for security guards or other specialized personnel and equipment training and management needed to effectively carry out the protection tasks during normal and security emergency conditions.

Security Systems

The Physical Security Protective Systems activity provides for equipment to protect vital security interests and government property per the local threat. Equipment and hardware includes fences, barriers, lighting, sensors, entry control devices, etc. This hardware and equipment is generally operated and used to support the protective guard mission as well.

Information Security

The Information Security activity ensures that materials and documents, that may contain classified or "Official Use Only" (OUO) information, are accurately and consistently identified, properly reviewed for content, appropriately marked and protected from unauthorized disclosure, and ultimately destroyed in an appropriate manner.

Cyber Security

The Cyber Security activity ensures that classified and OUO information that is electronically processed or transmitted is properly identified and protected, and that all electronic systems have an appropriate level of infrastructure reliability and integrity.

Personnel Security

The Personnel Security activity includes security clearance programs, employee security education and visitor control. Employee education and awareness is accomplished through initial and termination briefings, re-orientations, computer based training, special workshops, publications, signs, and posters.

Material Control and Accountability

The Material Control and Accountability activity provides for the control and accountability of special nuclear materials, including training and development for assessing the amounts of material involved in packaged items, process systems and wastes. Additionally, this activity documents that a theft, diversion or operational loss of special nuclear material has not occurred. Also included is on-site and off-site transport of special nuclear materials in accordance with mission, environment, safety and health requirements.

Program Management

The Program Management activity includes policy oversight and development and updating of security plans, assessments and approvals to determine if assets are at risk. Also encompassed are contractor management and administration, planning and integration of security activities into facility operations.

Significant Program Shifts

In FY 2004 there are no significant program shifts. In FY 2002 increased program emphasis was due to the heightened security demands from the September 11, 2001 incident.

Funding Profile

(dollars in thousands)

	FY 2002 Comparable Appropriation	FY 2003 Request	FY 2004 Request	\$ Change	% Change
Science Safeguards and Security					
Protective Forces.....	23,085	22,345	22,345	0	0.0%
Security Systems.....	8,314	4,532	4,532	0	0.0%
Information Security.....	1,023	1,000	1,000	0	0.0%
Cyber Security.....	10,265	11,714	11,714	0	0.0%
Personnel Security.....	1,831	2,576	2,576	0	0.0%
Material Control and Accountability.....	2,031	2,676	2,676	0	0.0%
Program Management.....	3,681	3,284	3,284	0	0.0%
Subtotal, Science Safeguards and Security.....	50,230	48,127	48,127	0	0.0%
Less Security Charge for Reimbursable Work.....	-4,460	-4,383	-4,383	0	0.0%
Total, Science Safeguards and Security.....	45,770 ^{ab}	43,744	43,744	0	0.0%

Public Law Authorization:

Public Law 95-91, "Department of Energy Organization Act"

Public Law 103-62, "Government Performance and Results Act of 1993"

^a Includes \$2,650,000 transferred from Basic Energy Sciences (\$2,600,000) and Biological and Environmental Research (\$50,000) for a FY 2002 reprogramming for safeguards and security.

^b Excludes \$29,000 for the FY 2002 rescission contained in section 1403 of P.L. 107-226, Supplemental Appropriations for further recovery from and response to terrorist attacks on the United States.

Funding By Site^a

(dollars in thousands)

	FY 2002	FY 2003	FY 2004	\$ Change	% Change
Chicago Operations Office					
Ames Laboratory.....	397	409	409	0	0.0%
Argonne National Laboratory.....	7,679	7,809	7,809	0	0.0%
Brookhaven National Laboratory	10,916	10,970	10,970	0	0.0%
Fermi National Accelerator Laboratory	2,684	2,837	2,837	0	0.0%
Princeton Plasma Physics Laboratory.....	1,828	1,855	1,855	0	0.0%
Total, Chicago Operations Office.....	23,504	23,880	23,880	0	0.0%
Oakland Operations Office					
Lawrence Berkeley National Laboratory....	4,706	4,753	4,753	0	0.0%
Stanford Linear Accelerator Center.....	2,150	2,207	2,207	0	0.0%
Total, Oakland Operations Office	6,856	6,960	6,960	0	0.0%
Oak Ridge Operations Office					
Oak Ridge Inst. for Science & Education ..	1,081	1,254	1,254	0	0.0%
Oak Ridge National Laboratory	9,509	7,913	7,913	0	0.0%
Thomas Jefferson National Accelerator Facility.....	927	972	972	0	0.0%
Oak Ridge Operations Office	8,322	7,148	7,148	0	0.0%
Total, Oak Ridge Operations Office.....	19,839	17,287	17,287	0	0.0%
Washington Headquarters.....	31	0	0	0	0.0%
Subtotal, Science Safeguards and Security.....	50,230	48,127	48,127	0	0.0%
Less Security Charge for Reimbursable Work ..	-4,460	-4,383	-4,383	0	0.0%
Total, Science Safeguards and Security	45,770^{bc}	43,744	43,744	0	0.0%

^a On December 20, 2002, the National Nuclear Security Administration (NNSA) disestablished the Albuquerque, Oakland, and Nevada Operations Offices, renamed existing area offices as site offices, established a new Nevada Site Office, and established a single NNSA Service Center to be located in Albuquerque. Other aspects of the NNSA organizational changes will be phased in and consolidation of the Service Center in Albuquerque will be completed by September 30, 2004. For budget display purposes, DOE is displaying non-NNSA budgets by site in the traditional pre-NNSA organizational format.

^b Includes \$2,650,000 transferred from Basic Energy Sciences (\$2,600,000) and Biological and Environmental Research (\$50,000) for a FY 2002 reprogramming for safeguards and security.

^c Excludes \$29,000 for the FY 2002 rescission contained in section 1403 of P.L. 107-226, Supplemental Appropriations for further recovery from and response to terrorist attacks on the United States.

Site Description

Safeguards and Security activities are conducted to meet the requirements of the following program elements: Physical Protection Protective Forces, Physical Security Protective Systems, Information Security, Cyber Security, Personnel Security, Material Control and Accountability, and Program Management. A summary level description of each activity is provided in the preceding Program Mission narrative. These activities ensure adequate protection of DOE security interests.

The attainment of the Safeguards and Security program goals and objectives are measured by progress made towards established performance measures. The technical excellence of the field security program is continually re-evaluated through field and Headquarters reviews. **Performance will be measured** at all sites by accomplishing the 98% success rate for preventing unauthorized intrusions into SC Cyber Systems that process "Official Use Only" (OUO) information, with a long term goal of striving for 100% in the outyears.

Detailed Program Justification

(dollars in thousands)

	FY 2002	FY 2003	FY 2004
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Ames Laboratory	397	409	409
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The Ames Laboratory Safeguards and Security program coordinates planning, policy, implementation and oversight in the areas of security systems, protective forces, personnel security, material control and accountability, and cyber security. A protective force is maintained to provide protection of personnel, equipment, and property from acts of theft, vandalism, and sabotage through facility walk throughs, monitoring of electronic alarm systems, and emergency communications. Reimbursable work is included in the numbers above; the amount for FY 2004 is \$26,000.

Argonne National Laboratory	7,679	7,809	7,809
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The Argonne National Laboratory Safeguards and Security program provides protection of nuclear materials, classified matter, government property, and other vital assets from unauthorized access, theft, diversion, sabotage, espionage, and other hostile acts that may cause risks to national security, the health and safety of DOE and contractor employees, the public, or the environment. Program activities include security systems, material control and accountability, information and cyber security, and personnel security. In addition, a protective force is maintained. These activities ensure that the facility, personnel, and assets remain safe from potential threats. Reimbursable work is included in the numbers above; the amount for FY 2004 is \$388,000.

Brookhaven National Laboratory	10,916	10,970	10,970
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Brookhaven National Laboratory (BNL) Safeguards and Security program activities are focused on protective forces, cyber security, physical security, and material control and accountability. BNL operates a transportation division to move special nuclear materials around the site. Material control and accountability efforts focus on accurately accounting for and protecting the sites special nuclear materials. Reimbursable work is included in the numbers above; the amount for FY 2004 is \$806,000.

(dollars in thousands)

FY 2002	FY 2003	FY 2004
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Fermi National Accelerator Laboratory **2,684** **2,837** **2,837**

Fermi National Accelerator Laboratory Safeguards and Security program efforts are directed at maintaining protective force staffing and operations to protect personnel and the facility as well as at continuing cyber security, security systems, and a material control and accountability program to accurately account for and protect the facilities special nuclear materials.

Lawrence Berkeley National Laboratory **4,706** **4,753** **4,753**

The Lawrence Berkeley National Laboratory Safeguards and Security program provides physical protection of personnel and laboratory facilities. This is accomplished with protective forces, security systems, cyber security, personnel security, and material control and accountability of special nuclear material. Reimbursable work is included in the numbers above; the amount for FY 2004 is \$830,000.

Oak Ridge Institute for Science and Education **1,081** **1,254** **1,254**

The Oak Ridge Institute for Science and Education (ORISE) Safeguards and Security program provides physical protection/protective force services by employing unarmed security officers. The facilities are designated as property protection areas for the purpose of protecting government owned assets. In addition to the government owned facilities and personal property, ORISE possesses small quantities of nuclear materials that must be protected. The program includes information security, personnel security, protective forces, security systems, and cyber security. Reimbursable work is included in the numbers above; the amount for FY 2004 is \$319,000.

Oak Ridge National Laboratory **9,509** **7,913** **7,913**

The Oak Ridge National Laboratory (ORNL) Safeguards and Security program includes security systems, information security, cyber security, personnel security, material control and accountability, and program management. Program planning functions at the Laboratory provide for short- and long-range strategic planning, and special safeguards plans associated with both day-to-day protection of site-wide security interests and preparation for contingency operations. Additionally, ORNL is responsible for provision of overall laboratory policy direction and oversight in the security arena; for conducting recurring programmatic self-assessments; for assuring a viable ORNL Foreign Ownership, Control or Influence (FOCI) program is in place; and for identifying, or tracking, and obtaining closure on findings or deficiencies noted during inspections, surveys, or assessments of safeguards and security programs. Reimbursable work is included in the numbers above; the amount for FY 2004 is \$1,945,000.

Oak Ridge Operations Office..... **8,322** **7,148** **7,148**

The Oak Ridge Operations Office Safeguards and Security program provides for contractor protective forces for the Oak Ridge National Laboratory. This includes protection of a category 1 Special Nuclear Material Facility, Building 3019 (\$6,013,000). Other small activities include security systems, information security, and personnel security.

(dollars in thousands)

	FY 2002	FY 2003	FY 2004
Princeton Plasma Physics Laboratory	1,828	1,855	1,855
<p>The Princeton Plasma Physics Laboratory Safeguards and Security program provides for protection of nuclear materials, government property, and other vital assets from unauthorized access, theft, diversion, sabotage, or other hostile acts. These activities result in reduced risk to national security and the health and safety of DOE and contractor employees, the public, and the environment. Reimbursable work is included in the numbers above; the amount for FY 2004 is \$54,000.</p>			
Stanford Linear Accelerator Center	2,150	2,207	2,207
<p>The Stanford Linear Accelerator Center Safeguards and Security program focuses on reducing the risk to DOE national facilities and assets. The program consists primarily of physical protection protective forces and cyber security program elements. Reimbursable work is included in the numbers above; the amount for FY 2004 is \$15,000.</p>			
Thomas Jefferson National Accelerator Facility	927	972	972
<p>Thomas Jefferson National Accelerator Facility has a guard force that provides 24-hour services for the accelerator site and after-hours property protection security for the entire site. Other security programs include cyber security, program management, and security systems.</p>			
All Other	31	0	0
<p>This funding provides for program management needs for the Office of Science in FY 2002.</p>			
Subtotal, Science Safeguards and Security	50,230	48,127	48,127
Less Security Charge for Reimbursable Work	-4,460	-4,383	-4,383
Total, Science Safeguards and Security	45,770	43,744	43,744

Subprogram Goals

Performance will be measured by a 98% success rate for preventing unauthorized intrusions into SC Cyber Systems that process Official Use Only information, with a long term goal of striving for 100% in the outyears.

Performance Indicator

Prevent unauthorized cyber intrusions. This will be accomplished by: (1) Reviewing Computer Incident Advisory Capability (CIAC) incident reports for SC sites that process Official Use Only information to establish a current baseline number of unauthorized intrusions into SC Cyber Systems; and (2) 100% of SC CSPPs submitted and approved in a complete and timely manner.

Annual Performance Results and Targets

FY 2002 Results	FY 2003 Targets	FY 2004 Targets
Establish baseline of actual intrusions.	95% success rate for preventing unauthorized intrusions into SC Cyber Systems that process official use only information commensurate with risk from FY 2002 baseline.	98% success rate for preventing unauthorized intrusions into SC Cyber Systems that process official use only information commensurate with risk from FY 2003 baseline.

FY 2002 Results	FY 2003 Targets	FY 2004 Targets
	<p>This will be accomplished by: (1) Reviewing Computer Incident Advisory Capability (CIAC) reports for SC sites that process Official Use Only information to establish a current baseline number of unauthorized intrusions into SC Cyber Systems; (2) Achieving, maintaining, and verifying that incidents remain below 5% and update Computer Security Program Plans (CSPPs) to reflect this posture; and (3) 100% of SC CSPPs submitted and approved in a complete and timely manner.</p>	<p>This will be accomplished by: (1) Reviewing Computer Incident Advisory Capability (CIAC) reports for SC sites that process Official Use Only information to establish a current baseline number of unauthorized intrusions into SC Cyber Systems; (2) Achieving, maintaining, and verifying that incidents remain below 2% and update Computer Security Program Plans (CSPPs) to reflect this posture; and (3) 100% of SC CSPPs submitted and approved in a complete and timely manner.</p>

Detailed Funding Schedule

(dollars in thousands)

	FY 2002	FY 2003	FY 2004	\$ Change	% Change
Ames Laboratory					
Protective Forces.....	149	143	143	0	0.0%
Security Systems.....	60	24	24	0	0.0%
Cyber Security.....	97	148	148	0	0.0%
Personnel Security.....	34	42	42	0	0.0%
Material Control and Accountability.....	7	7	7	0	0.0%
Program Management.....	50	45	45	0	0.0%
Total, Ames Laboratory.....	397	409	409	0	0.0%
Argonne National Laboratory					
Protective Forces.....	2,963	3,209	3,209	0	0.0%
Security Systems.....	715	455	455	0	0.0%
Information Security.....	236	211	211	0	0.0%
Cyber Security.....	1,705	1,888	1,888	0	0.0%
Personnel Security.....	865	904	904	0	0.0%
Material Control and Accountability.....	815	796	796	0	0.0%
Program Management.....	380	346	346	0	0.0%
Total, Argonne National Laboratory.....	7,679	7,809	7,809	0	0.0%
Brookhaven National Laboratory					
Protective Forces.....	6,083	6,146	6,146	0	0.0%
Security Systems.....	931	577	577	0	0.0%
Information Security.....	126	131	131	0	0.0%
Cyber Security.....	2,285	2,470	2,470	0	0.0%
Personnel Security.....	38	49	49	0	0.0%
Material Control and Accountability.....	482	742	742	0	0.0%
Program Management.....	971	855	855	0	0.0%
Total, Brookhaven National Laboratory.....	10,916	10,970	10,970	0	0.0%
Fermi National Accelerator Laboratory					
Protective Forces.....	1,447	1,700	1,700	0	0.0%
Security Systems.....	417	246	246	0	0.0%
Cyber Security.....	653	780	780	0	0.0%
Material Control and Accountability.....	66	49	49	0	0.0%
Program Management.....	101	62	62	0	0.0%
Total, Fermi National Accelerator Laboratory.....	2,684	2,837	2,837	0	0.0%

(dollars in thousands)

	FY 2002	FY 2003	FY 2004	\$ Change	% Change
Lawrence Berkeley National Laboratory					
Protective Forces.....	1,297	1,392	1,392	0	0.0%
Security Systems.....	1,113	942	942	0	0.0%
Cyber Security.....	1,802	2,019	2,019	0	0.0%
Personnel Security.....	32	11	11	0	0.0%
Material Control and Accountability.....	22	38	38	0	0.0%
Program Management.....	440	351	351	0	0.0%
Total, Lawrence Berkeley National Laboratory.....	4,706	4,753	4,753	0	0.0%
Oak Ridge Institute for Science and Education					
Protective Forces.....	165	288	288	0	0.0%
Security Systems.....	153	100	100	0	0.0%
Information Security.....	122	139	139	0	0.0%
Cyber Security.....	332	420	420	0	0.0%
Personnel Security.....	91	108	108	0	0.0%
Program Management.....	218	199	199	0	0.0%
Total, Oak Ridge Institute for Science and Education.....	1,081	1,254	1,254	0	0.0%
Oak Ridge National Laboratory					
Security Systems.....	4,636	1,790	1,790	0	0.0%
Information Security.....	246	304	304	0	0.0%
Cyber Security.....	2,154	2,305	2,305	0	0.0%
Personnel Security.....	528	1,182	1,182	0	0.0%
Material Control and Accountability.....	639	1,044	1,044	0	0.0%
Program Management.....	1,306	1,288	1,288	0	0.0%
Total, Oak Ridge National Laboratory.....	9,509	7,913	7,913	0	0.0%
Oak Ridge Operations Office					
Protective Forces.....	7,700	6,541	6,541	0	0.0%
Security Systems.....	86	112	112	0	0.0%
Information Security.....	293	215	215	0	0.0%
Personnel Security.....	243	280	280	0	0.0%
Total, Oak Ridge Operations Office.....	8,322	7,148	7,148	0	0.0%
Princeton Plasma Physics Laboratory					
Protective Forces.....	1,137	905	905	0	0.0%
Security Systems.....	35	113	113	0	0.0%
Cyber Security.....	559	775	775	0	0.0%
Program Management.....	97	62	62	0	0.0%
Total, Princeton Plasma Physics Laboratory.....	1,828	1,855	1,855	0	0.0%

(dollars in thousands)

	FY 2002	FY 2003	FY 2004	\$ Change	% Change
Stanford Linear Accelerator Center					
Protective Forces.....	1,742	1,606	1,606	0	0.0%
Security Systems.....	0	0	0	0	0.0%
Cyber Security	408	601	601	0	0.0%
Program Management.....	0	0	0	0	0.0%
Total, Stanford Linear Accelerator Center.....	2,150	2,207	2,207	0	0.0%
Thomas Jefferson National Accelerator Facility					
Protective Forces.....	402	415	415	0	0.0%
Security Systems.....	168	173	173	0	0.0%
Cyber Security	270	308	308	0	0.0%
Program Management.....	87	76	76	0	0.0%
Total, Thomas Jefferson National Accelerator Facility.....	927	972	972	0	0.0%
All Other					
Program Management.....	31	0	0	0	0.0%
Subtotal, Science Safeguards and Security	50,230	48,127	48,127	0	0.0%
Less Security Charge for Reimbursable Work	-4,460	-4,383	-4,383	0	0.0%
Total, Science Safeguards and Security	45,770	43,744	43,744	0	0.0%

Explanation of Funding Changes

FY 2004 vs. FY 2003 (\$000)

No Funding Changes.

Capital Operating Expenses & Construction Summary

Capital Operating Expenses

(dollars in thousands)

	FY 2002	FY 2003	FY 2004	\$ Change	% Change
General Plant Projects	2,821	0	0	0	0.0%
Capital Equipment.....	95	0	0	0	0.0%
Total, Capital Operating Expenses.....	2,916	0	0	0	0.0%