

## Safeguards and Security

### Funding Profile by Subprogram

(dollars in thousands)

	FY 2007 Current Appropriation	FY 2008 Original Appropriation	FY 2008 Adjustments	FY 2008 Current Appropriation	FY 2009 Request
Safeguards and Security					
Protective Forces	31,652	33,032	—	33,032	34,384
Security Systems	6,705	6,993	—	6,993	7,940
Information Security	4,169	3,781	—	3,781	4,028
Cyber Security	18,322	18,070	-646 <sup>a</sup>	17,424	19,515
Personnel Security	5,552	5,153	—	5,153	5,615
Material Control and Accountability	2,355	2,401	—	2,401	2,348
Program Management	7,075	7,162	—	7,162	6,773
Subtotal, Safeguards and Security	75,830	76,592	-646 <sup>a</sup>	75,946	80,603
Less Security Charge for Reimbursable Work	-5,605	-5,605	—	-5,605	—
Total, Safeguards and Security	70,225	70,987	-646 <sup>a</sup>	70,341	80,603

#### Public Law Authorizations:

Public Law 95-91, "Department of Energy Organization Act", 1977

Public Law 109-58, "Energy Policy Act of 2005"

Public Law 110-69, "America COMPETES Act of 2007"

#### 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 and destruction of Department of Energy (DOE) assets, and hostile acts that may cause adverse impacts on fundamental science, national security, the health and safety of DOE and contractor employees, the public, and the environment.

#### Protective Forces

The Protective Forces activity provides for security guards or security police officers and equipment, training and maintenance needed to effectively carry out the protection tasks during normal and increased or emergency security conditions (SECON). This request is adequate for up to 60 days of heightened security at the SECON 2 level.

#### Security Systems

The Security Systems activity provides for equipment to protect vital security interests and government property per the local threat. Equipment and hardware include items such as, fences, barriers, lighting, sensors, and entry control devices.

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<sup>a</sup> Reflects a reduction for the 0.91% rescission in P.L. 110-161, the Energy and Water Development and Related Agencies Appropriations Act, 2008.

## **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. This involves perimeter protection, intrusion detection, firewall protection, and user authentication. Cyber security also includes enhancements in network traffic logging and monitoring, risk assessments, and improvements in incident response. It provides for the development of virtual private networks and increased security for remote login and wireless connections.

## **Personnel Security**

The Personnel Security activity includes security clearance programs, employee security education, and visitor control. Ongoing implementation and investigative activity for the Personal Identity Verification (PIV) program is also supported under the Personnel Security activity. Employee education and awareness is accomplished through initial, refresher, and termination briefings, 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 of personnel for assessing the amounts of material involved in packaged items, process systems, and wastes. Additionally, this activity provides the programmatic mechanism to preclude theft or operational loss of special nuclear material. Also included is protection for on- and off-site transport of special nuclear materials.

## **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, training, planning, and integration of security activities into facility operations.

## **Significant Program Shifts**

Beginning in FY 2009, all funding associated with safeguards and security charges at SC laboratories will be requested through direct appropriations. In FY 2008 and before, a portion of safeguards and security expenses was recovered through charges to reimbursable customers at the laboratories.

## Detailed Justification

(dollars in thousands)

	FY 2007	FY 2008	FY 2009
<b>Ames Laboratory</b>	<b>946</b>	<b>944</b>	<b>974</b>
▪ Protective Forces	152	179	184
▪ Security Systems	40	17	36
▪ Information Security	2	—	—
▪ Cyber Security	674	674	675
▪ Personnel Security	33	33	35
▪ Material Control and Accountability	5	1	6
▪ Program Management	40	40	38

The Ames Laboratory Safeguards and Security program coordinates planning, policy, implementation, and oversight in the areas of protective forces, security systems, cyber security, personnel security, material control and accountability, and program management. A protective force is maintained to provide protection of personnel, equipment, and property from acts of theft, vandalism, and sabotage through facility walk-through, monitoring of electronic alarm systems, and emergency communications.

<b>Argonne National Laboratory</b>	<b>8,375</b>	<b>8,527</b>	<b>8,562</b>
▪ Protective Forces	3,000	3,000	3,000
▪ Security Systems	744	744	744
▪ Information Security	350	350	350
▪ Cyber Security	1,905	1,905	1,940
▪ Personnel Security	1,070	1,070	1,070
▪ Material Control and Accountability	754	830	830
▪ Program Management	552	628	628

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 protective forces, security systems, information security, cyber security, personnel security, material control and accountability, and program management.

(dollars in thousands)

	FY 2007	FY 2008	FY 2009
<b>Brookhaven National Laboratory</b>	<b>10,710</b>	<b>10,834</b>	<b>11,451</b>
▪ Protective Forces	5,392	5,510	6,030
▪ Security Systems	879	878	853
▪ Information Security	568	568	529
▪ Cyber Security	2,037	2,037	2,220
▪ Personnel Security	528	528	496
▪ Material Control and Accountability	491	498	548
▪ Program Management	815	815	775

The Brookhaven National Laboratory program provides physical protection of personnel and laboratory facilities. Information security provides for site-wide data integrity and training. The laboratory operates a transportation division to move accountable nuclear materials around the site. Material control and accountability efforts focus on accurately accounting for and protecting the site's special nuclear materials. An increase in protective forces provides for required training and equipment, including Level III ballistic vests. Increased funding in cyber security provides for certifications, security testing and evaluation, an enhanced intrusion detection system program, network access control, forensics, and upgrade spam filtering technology.

<b>Chicago Office</b>	<b>488</b>	<b>1,607</b>	<b>2,150</b>
▪ Protective Forces	8	1,600	1,600
▪ Cyber Security	480	—	—
▪ Personnel Security	—	7	550

The Chicago Office through a direct contract provides guard force services to monitor actions of visitors and mitigate threats to employees and facilities for the Fermi National Accelerator Laboratory. Also included is Homeland Security Presidential Directive-12 implementation cost and maintenance through procurement with the General Services Administration.

<b>Fermi National Accelerator Laboratory</b>	<b>2,908</b>	<b>1,686</b>	<b>1,742</b>
▪ Protective Forces	1,224	181	13
▪ Security Systems	538	464	560
▪ Cyber Security	965	965	977
▪ Material Control and Accountability	46	46	44
▪ Program Management	135	30	148

The Fermi National Accelerator Laboratory (Fermilab) Safeguards and Security program efforts are directed at maintaining operations to protect personnel and the facility. The cyber security element addresses the network segmentation requirements that were designed to enhance the protection mechanisms for sensitive unclassified information, such as personally identifiable information. Starting at the end of FY 2007, protective forces for Fermilab were provided through a direct contract administered and funded under the Chicago Office.

(dollars in thousands)

	FY 2007	FY 2008	FY 2009
<b>Lawrence Berkeley National Laboratory</b>	<b>4,894</b>	<b>4,985</b>	<b>5,006</b>
▪ Protective Forces	1,668	1,868	1,782
▪ Security Systems	460	334	355
▪ Cyber Security	2,024	2,024	2,025
▪ Personnel Security	109	134	129
▪ Material Control and Accountability	24	14	20
▪ Program Management	609	611	695

The Lawrence Berkeley National Laboratory Safeguards and Security program provides physical protection of personnel and laboratory facilities. This is accomplished by integrating various security services including protective forces, security systems, cyber security, personnel security, material control and accountability of special nuclear material, and program management.

<b>Oak Ridge Institute for Science and Education</b>	<b>1,585</b>	<b>1,579</b>	<b>1,617</b>
▪ Protective Forces	314	274	253
▪ Security Systems	102	102	237
▪ Information Security	148	182	123
▪ Cyber Security	610	610	610
▪ Personnel Security	100	100	117
▪ Program Management	311	311	277

The Oak Ridge Institute for Science and Education (ORISE) Safeguards and Security program provides physical protection or 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. Since the inventory is static, it is accounted for under program management.

(dollars in thousands)

	FY 2007	FY 2008	FY 2009
<b>Oak Ridge National Laboratory</b>	<b>7,473</b>	<b>7,897</b>	<b>8,895</b>
▪ Security Systems	2,225	2,789	3,222
▪ Information Security	579	449	790
▪ Cyber Security	2,016	2,355	2,590
▪ Personnel Security	709	764	798
▪ Material Control and Accountability	408	385	326
▪ Program Management	1,536	1,155	1,169
<p>Program planning functions at the laboratory provide for short- and long-range strategic planning, and site safeguards and security plans associated with both the protection of security interests and preparations for contingency operations. Protective force resources for Oak Ridge National Laboratory (ORNL), including those to protect the national U233 Vault at Building 3019, are funded within the Oak Ridge Office. Additional funding provides for communication equipment and replacement of portions of aging security systems. Efforts in information security are enhanced in response to increased DOE emphasis in this area. Cyber security funding increases to implement authentication infrastructure, maintain accreditation and certification of cyber security master plans, and to upgrade and maintain the technical infrastructure.</p>			
<b>Oak Ridge Office</b>	<b>18,476</b>	<b>17,849</b>	<b>18,819</b>
▪ Protective Forces	16,312	16,838	17,921
▪ Security Systems	196	157	157
▪ Information Security	765	475	375
▪ Cyber Security	338	—	—
▪ Personnel Security	865	379	366
<p>The Oak Ridge Office Safeguards and Security program provides for contractor protective forces for ORNL, including protection of a Category I special nuclear material facility, Building 3019 (\$4,700,000). In addition, protective forces are provided for the Federal Office Building complex. Other smaller activities to support Oak Ridge National Laboratory's mission include: security systems, information security, and personnel security.</p>			
<b>Office of Scientific and Technical Information</b>	<b>483</b>	<b>470</b>	<b>490</b>
▪ Protective Forces	15	15	15
▪ Security Systems	43	30	30
▪ Cyber Security	400	400	420
▪ Program Management	25	25	25

The Office of Scientific and Technical Information's mission is to collect, preserve, disseminate, and leverage the scientific and technical information resources of DOE to expand the knowledge base of science and technology and facilitate scientific discovery and application. Safeguards and Security program activities include protective forces, security systems, cyber security, and program management.

(dollars in thousands)

	FY 2007	FY 2008	FY 2009
<b>Pacific Northwest National Laboratory</b>	<b>11,318</b>	<b>11,143</b>	<b>11,163</b>
▪ Security Systems	1,356	1,356	1,462
▪ Information Security	1,757	1,757	1,861
▪ Cyber Security	2,904	2,260	2,700
▪ Personnel Security	2,138	2,138	2,054
▪ Material Control and Accountability	627	627	574
▪ Program Management	2,536	3,005	2,512

The Pacific Northwest National Laboratory (PNNL) Safeguards and Security program elements work together in conjunction with a counterintelligence program and an export control program to ensure appropriate protection and control of laboratory assets while ensuring that PNNL remains appropriately accessible to visitors for technical collaboration. Funding for protective force operations is the responsibility of the Office of Environmental Management.

<b>Princeton Plasma Physics Laboratory</b>	<b>2,128</b>	<b>2,128</b>	<b>2,149</b>
▪ Protective Forces	975	975	975
▪ Security Systems	20	20	20
▪ Cyber Security	795	795	816
▪ Program Management	338	338	338

The Princeton Plasma Physics Laboratory Safeguards and Security program provides for protection of 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.

<b>Stanford Linear Accelerator Center</b>	<b>2,566</b>	<b>2,566</b>	<b>2,586</b>
▪ Protective Forces	1,897	1,897	1,916
▪ Cyber Security	669	669	670

The Stanford Linear Accelerator Center (SLAC) Safeguards and Security program focuses on reducing the risk to DOE national facilities and assets. SLAC provides the essential required safeguards and security programs while currently making improvements in the cyber security program due to increased Federal Information Security Management Act requirements and threats reporting from the Department of Homeland Security, National Cyber Security Division.

(dollars in thousands)

	FY 2007	FY 2008	FY 2009
<b>Thomas Jefferson National Accelerator Facility</b>	<b>1,376</b>	<b>1,376</b>	<b>1,411</b>
▪ Protective Forces	695	695	695
▪ Security Systems	102	102	122
▪ Cyber Security	505	505	520
▪ Program Management	74	74	74
<p>Thomas Jefferson National Accelerator Facility (TJNAF) conducts fundamental science research while providing support to federal government activities causing the need for federal level safeguard and security procedures. TJNAF has a guard force that provides 24-hour services for the accelerator site and after-hours property protection security for the entire site.</p>			
<b>All Other</b>	<b>2,104</b>	<b>2,355</b>	<b>3,588</b>
▪ Security Systems	—	—	142
▪ Cyber Security	2,000	2,225	3,352
▪ Program Management	104	130	94
<p>All Other supports the continuation and management of a consistent cyber security approach across the Office of Science laboratory complex and program management needs for SC. A portion of funding for security systems and cyber security will be allocated to sites based on highest priority needs following programmatic reviews.</p>			
<b>Subtotal, Safeguards and Security</b>	<b>75,830</b>	<b>75,946</b>	<b>80,603</b>
<b>Less Security Charge for Reimbursable Work</b>	<b>-5,605</b>	<b>-5,605</b>	<b>—</b>
<b>Total, Safeguards and Security</b>	<b>70,225</b>	<b>70,341</b>	<b>80,603</b>

### Explanation of Funding Changes

FY 2009 vs. FY 2008 (\$000)
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#### Ames Laboratory

Increased funding is provided for overall effectiveness of security operations with improvements and modernization of security systems.

+30

#### Argonne Laboratory

Funding for cyber security increases to address infrastructure refresh, advancement of cyber security policy, computing protection, and two-factor authentication.

+35

**Brookhaven National Laboratory**

The funding increase is needed to provide enhanced protective force measures and required training (\$+520,000) and for cyber security to provide for certifications, security testing and evaluation, enhanced intrusion detection system program, network access control, forensics, and upgrade spam filtering technology (\$+183,000). Other minor adjustments will realign funding to the highest priority areas (\$-86,000). +617

**Chicago Office**

The funding increase to personnel security addresses Homeland Security Presidential Directive-12 for the requirement of new employee identity cards and program enrollment stations. +543

**Fermi National Accelerator Laboratory**

The funding increase provides for essential security systems and program management needs. +56

**Lawrence Berkeley National Laboratory**

Increased funding is provided to improve overall safeguards and security effectiveness; funding is realigned to reflect the laboratory's safeguards and security priorities. +21

**Oak Ridge Institute for Science and Education**

The funding increase provides for required maintenance on security systems, and funding is realigned to highest safeguards and security priorities. +38

**Oak Ridge National Laboratory**

Security systems increases to provide for enhanced compatibility of communication equipment and to replace portions of aging security systems (\$+433,000). Information security increases to reflect the high priority placed on this area due to incidents of security concern and inquiries (\$+341,000). Funding for cyber security increases to implement authentication infrastructure, maintain accreditation and certification of cyber security master plans, and upgrade and maintain the technical infrastructure (\$+235,000). Funding in other elements decreases to realign funds with program priorities (\$-11,000). +998

**Oak Ridge Office**

The increase, primarily in protective forces, supports: a contractual pension contribution payment; replacement of radio equipment that will no longer be manufactured; upgrade of communication security devices due to technology changes for classified communication links; and required training. +970

**Office of Scientific and Technical Information**

The funding increase for cyber security provides the ability to address gaps identified by the SC Site Assistance Visit for an intrusion prevention system, mobile devices, and infrastructure support. +20

**Pacific Northwest National Laboratory**

Funding is increased for security systems to provide upgrades to the closed circuit television (\$+106,000); cyber security to maintain baseline compliance activities, implement classified diskless architecture, enable sustained cyber security operations and ability to respond to newly discovered vulnerabilities in systems, and implement cyber security upgrades due to technology advances and DOE requirements (\$+440,000). Funding in other elements decreases to reflect the laboratory’s safeguards and security priorities (\$-526,000). +20

**Princeton Plasma Physics Laboratory**

The increase to cyber security provides for deployment and administration of an enterprise-wide encryption system for desktops, laptops, and removable media. +21

**Stanford Linear Accelerator Center**

The funding increase for protective forces will support emergency response units, as required. +20

**Thomas Jefferson National Accelerator Facility**

The increase for security systems will support purchases of video cameras and equipment (\$+20,000). The increase for cyber security provides for the periodic replacement of cyber security protection and detection capability equipment to ensure continuing reliability (\$+15,000). +35

**All Other**

The funding increases concentrate on cyber security and security systems. The need for obtaining a safe and secure cyber environment is a high requirement to prevent data corruption and cyber espionage. Funding will be allocated to sites based on priority needs following programmatic reviews for cyber security and security systems. +1,233

**Subtotal Funding Change, Safeguards and Security** +4,657

**Security Charge for Reimbursable Work**

Beginning in FY 2009, all funding associated with safeguards and security charges at SC laboratories will be requested through direct appropriations. In FY 2008 and before, a portion of safeguards and security expenses was recovered through charges to reimbursable customers at the laboratories. +5,605

**Total Funding Change, Safeguards and Security** +10,262

## Capital Operating Expenses and Construction Summary

### Capital Operating Expenses

(dollars in thousands)

	FY 2007	FY 2008	FY 2009
General Plant Projects	322	—	—
Capital Equipment	195	110	—
Total, Capital Operating Expenses	517	110	—