Safeguards and Security

Overview

The Safeguards and Security (S&S) program mission is to support Departmental research at Office of Science (SC) laboratories by ensuring appropriate levels of protection against unauthorized access, theft, or destruction of Department assets. The S&S program mission also includes protection against hostile acts that may cause adverse impacts on fundamental science, national security, the health and safety of DOE and contractor employees, the public, or the environment. In order to execute this mission, the S&S program focuses on securing and protecting Special Nuclear Materials, protecting classified and unclassified controlled information, providing physical security controls at and around SC national laboratories, and ensuring that the laboratories have rigorous cyber security controls to protect sensitive and classified government data.

Based on complex-wide oversight security reviews, the S&S program is implementing sound, improved security practices at our laboratories to accomplish the mission. However, there are a few critical challenges our laboratories face that will require increased investment. The program's first priority is to provide security for the Special Nuclear Materials at the Oak Ridge National Laboratory (ORNL). Next, we must address the increasing cyber security threat, balancing investments in that area with the need to continue providing adequate resources for the ongoing physical security posture at our laboratories. Finally, where possible, we invest in physical security systems such as video surveillance and secure, automated entry to simultaneously make more efficient use of funds and improve laboratory security.

Highlights of the FY 2015 Budget Request

Ensuring nuclear security is among our most important commitments to the American taxpayer. In keeping with that focus, a critical challenge the SC S&S program faces is assuring adequate security for the special nuclear material housed in Building 3019 at the Oak Ridge National Laboratory. The 2012 security breach at the Y-12 complex prompted a thorough review of our posture, both current and planned, at that facility. These reviews highlighted opportunities for improvement that are being pursued vigorously. In addition, a new Protective Force contractor was brought on board in March 2013. As we continue to assess and improve security for Building 3019, we are increasing the level of investment needed to protect this facility. This increase will pay for improvements to security technologies, as well as the increasing costs of training, and special response capabilities.

The S&S program is working to consolidate the Central Alarm Station (CAS) activities being performed separately at the Oak Ridge Office (ORO), Oak Ridge National Laboratory (ORNL), and East Tennessee Technology Park (ETTP) into one central CAS operation. Once completed, this consolidation will provide SC with a full integration of alarm monitoring, system engineering, testing, maintenance, access controls, and overall accountability for CAS operations. This plan is expected to provide SC with added efficiencies by reducing the number of full time employee positions required to support these operations and by eliminating the continued cost to support alarm components reaching their end of life cycles at two additional facilities. Funding for this project began in FY 2013 and will continue in FY 2014 and FY 2015.

The Department is also collectively implementing a strategy for managing enterprise-wide identify management and cybersecurity for DOE systems and data, referred to as "CyberOne," which is managed through the Working Capital Fund. The CyberOne strategy will implement DOE Enterprise capabilities for incident management and HSPD-12 logical access. SC's portion of this investment is reflected in the increase for Cyber Security in the FY 2015 request.

Description

The S&S program is organized into seven functional areas: Protective Forces, Security Systems, Information Security, Cyber Security, Personnel Security, Material Control and Accountability, and Program Management.

Protective Forces

The Protective Forces element supports security officers, access control officers, and security policy officers assigned to protect S&S interests. Activities within this element include access control and security response operations as well as physical protection of the Department's critical assets and SC facilities. The Protective Forces mission includes providing effective response to emergency situations, random prohibited article inspections, security alarm monitoring, and performance testing of the protective force response to various event scenarios.

Security Systems

The Security Systems element provides physical protection of Departmental material, equipment, property, and facilities, and includes buildings, fences, barriers, lighting, sensors, surveillance devices, entry control devices, access control systems, and power systems operated and used to support the protection of DOE property, classified information, and other interests of national security.

Information Security

The Information Security element provides support to ensure that sensitive and classified information is accurately and consistently identified, reviewed, marked, protected, transmitted, stored, and ultimately destroyed. Specific activities within this element include management, planning, training, and oversight for maintaining security containers and combinations, marking documents, and administration of control systems, operations security, special access programs, technical surveillance countermeasures, and classification and declassification determinations.

Cyber Security

The Cyber Security element provides staffing for appropriate risk management tools and controls for sensitive or classified information that is electronically processed, transmitted, or stored. Risk management controls ensure that information systems, including the information contained within the systems, maintain confidentiality, integrity, and availability in a manner consistent with the SC mission.

Personnel Security

The Personnel Security element encompasses the processes for employee suitability and security clearance determinations at each site to ensure that individuals are trustworthy and eligible for access to classified information or matter. This element also includes the management of security clearance programs, adjudications, security education and awareness programs for Federal and contractor employees, and processing and hosting approved foreign visitors.

Material Control and Accountability (MC&A)

The MC&A element provides assurance that Departmental materials are properly controlled and accounted for at all times. This element supports administration, including testing performance and assessing the levels of protection, control, and accountability required for the types and quantities of materials at each facility; documenting facility plans for materials control and accountability; assigning authorities and responsibilities for MC&A functions; and establishing programs to detect and report occurrences such as material theft, the loss of control or inability to account for materials, or evidence of malevolent acts.

Program Management

The Program Management element coordinates the management of Protective Forces, Security Systems, Information Security, Personnel Security, Cyber Security, and MC&A to achieve and ensure appropriate levels of protections are in place.

Safeguards and Security Funding (\$K)

	FY 2013 Current	FY 2014 Enacted	FY 2014 Current	FY 2015 Request	FY 2015 vs. FY 2014 Enacted
Protective Forces	34,693	38,141	38,141	38,388	+247
Security Systems	10,165	13,319	13,319	13,521	+202
Information Security	4,119	4,164	4,164	4,432	+268
Cyber Security	15,646	17,599	17,599	23,908	+6,309
Personnel Security	4,760	5,143	5,143	5,180	+37
Material Control and Accountability	2,283	2,397	2,397	2,061	-336
Program Management	5,840	6,237	6,237	6,510	+273
Total, Safeguards and Security	77.506	87.000	87.000	94.000	+7.000

Safeguards and Security

Activities and Explanation of Changes

FY 2014 Enacted	FY 2015 Request	Explanation of Changes FY 2015 vs. FY 2014 Enacted
Protective Forces		
FY 2014 funding supports SC's portion of the Protective Forces Contract at Oak Ridge and maintains protection levels, equipment, facilities, and training needed to ensure effective performance at all SC laboratories.	The FY 2015 Request provides funding to maintain protection levels, equipment, facilities, and training needed to ensure proper protection and effective performance at all SC laboratories.	The increased request addresses cost of living adjustments and provides funding to maintain appropriate Protective Force operations at Building 3019 at Oak Ridge to include costs of shared training, technical surveillance services, and response capabilities.
Security Systems		
FY 2014 funding supports the CAS consolidation project at ORNL and the federal access control systems and upgrades needed to meet HSPD-12 requirements and implementation of technologies that will incrementally reduce reliance on the use of personnel for routine access control, employee verification, and other security services.	The FY 2015 Request provides funding to maintain the security systems currently in place, to support investments in SC laboratory physical security systems, and provides funding to support the continuation of the CAS consolidation project at ORNL.	Funding increases to support the continuation of the CAS consolidation project and to support implementation of technology upgrades and infrastructure investments in SC laboratory physical security systems, including those at Building 3019 that will improve security at laboratories and reduce reliance on the use of personnel for routine access control and employee verification processes.
Information Security		
FY 2014 funding maintains Information Security efforts to ensure proper document marking, storage, and protection of information.	The FY 2015 Request provides funding for personnel, equipment, and systems necessary to ensure sensitive and classified information is properly safeguarded at SC laboratories.	Funding increases to address adjustments in volume of DOE classified work and to provide the support needed to ensure proper processing of these materials.

FY 2014 Enacted	FY 2015 Request	Explanation of Changes FY 2015 vs. FY 2014 Enacted	
Cyber Security			
FY 2014 funding supports cyber security staffing needed to ensure laboratories are properly protected against emerging threats from persistent attacks against SC Information Technology systems. Funding supports threat assessments, risk management, and configuration and network management.	The FY 2015 Request maintains proper protection of SC laboratory computer resources and data and also supports SC's contribution of the Department's CyberOne strategy, which is managed through the Working Capital Fund. CyberOne is the Department's solution for managing enterprise-wide identity management and cyber-security for DOE systems and data. CyberOne will consolidate and streamline Department-wide systems and business processes to mitigate the risk of intrusion and the threat such intrusions pose to high-valued national assets. CyberOne will integrate various tools at headquarters and across the DOE complex to secure both data transmission and data repositories at these diverse sites.	The increased request provides \$7,351,000 to support SC's contribution to the Department's CyberOne strategy.	
Personnel Security			
Funding supports the necessary laboratory personnel to grant individual access to classified matter and/or special nuclear material and to allow foreign nationals access to SC facilities, consistent with agency procedures. Funding also supports security investigations for federal field personnel and security	FY 2015 funding will maintain support and Personnel Security efforts at SC laboratories.	Funding increases slightly to accommodate support for security investigations for Federal field personnel.	

awareness programs for employees.

FY 2014 Enacted	FY 2015 Request	Explanation of Changes FY 2015 vs. FY 2014 Enacted	
Material Control and Accountability			
Funding provides for establishing, controlling, and tracking inventories of special and other nuclear materials at SC laboratories. Activities supported by these funds include measurements, quality assurance, accounting, containment, surveillance, and physical inventories of materials.	Funding in FY 2015 maintains proper protection of material at SC laboratories.	Funding decreases to accommodate changes in site specific MC&A programs.	
Program Management			
FY 2014 funding maintains efforts to ensure security procedures and policy support the SC Research mission.	The FY 2015 Request provides funding for the oversight, administration, and planning for security programs at SC laboratories and to ensure security procedures and policy support SC Research missions.	Funding increases to accommodate laboratory and program priorities and maintain Program Management activities.	

Safeguards and Security Capital Summary (\$K)

	FY 2013 Current	FY 2014 Enacted	FY 2014 Current	FY 2015 Request	FY 2015 vs. FY 2014 Enacted
Capital Operating Expenses Summary					
General Plant Projects	1,100	0	0	0	0

Estimates of Cost Recovered for Safeguards and Security Activities (\$K)

In addition to the direct funding received from the Safeguards and Security Program, sites recover Safeguards and Security costs related to Work for Others (WFO) activities from WFO customers, including the cost of any unique security needs directly attributable to the customer. Estimates of those costs are shown below.

	FY 2013 Costs	FY 2014 Planned Costs	FY 2015 Planned Costs	FY 2015 vs. FY 2014
Ames National Laboratory	120	120	120	0
Argonne National Laboratory	1,100	1,100	1,100	0
Brookhaven National Laboratory	700	800	800	0
Lawrence Berkeley National Laboratory	698	733	733	0
Oak Ridge Institute for Science and Education	620	560	560	0
Oak Ridge National Laboratory	4,500	4,500	4,500	0
Pacific Northwest National Laboratory	4,555	4,300	4,300	0
Princeton Plasma Physics Laboratory	70	50	40	-10
SLAC National Accelerator Laboratory	80	104	104	0
Total, Security Cost Recovered	12,443	12,267	12,257	-10