



U.S. DEPARTMENT OF
ENERGY

Office of Enterprise Assessments Fiscal Year 2020 Independent Oversight Activities Overview

Report to Congress
February 2021

United States Department of Energy
Washington, DC 20585

Message from the Acting Secretary

The activities of the Office of Enterprise Assessments (EA) exemplify the Department of Energy's (DOE) commitment to protect national security assets and the health and safety of DOE employees and the public. EA provides an internal management assessment function for the Department that examines operations relating to security (physical, information, and cyber); environment, health, and safety (nuclear and industrial); and other critical functions of the DOE enterprise.

This report contains an overview of EA independent oversight activities, findings, and recommendations for Fiscal Year 2020, as requested in House Report 114-91.

This report is being provided to the following Members of Congress:

- **The Honorable Rosa DeLauro**
Chairwoman, House Committee on Appropriations
- **The Honorable Kay Granger**
Ranking Member, House Committee on Appropriations
- **The Honorable Patrick Leahy**
Chairman, Senate Committee on Appropriations
- **The Honorable Richard Shelby**
Vice Chairman, Senate Committee on Appropriations

If you have any questions or need additional information, please contact me or Ms. Katherine Donley, Deputy Director of External Coordination, Office of the Chief Financial Officer, at (202) 586-0176.

Sincerely,



David Huizenga
Acting Secretary of Energy

Executive Summary

The Office of Enterprise Assessments (EA) is responsible for implementing an Independent Oversight Program for security and safety within the U.S. Department of Energy (DOE) in accordance with DOE Orders 227.1A, *Independent Oversight Program*, and 226.1B, *Implementation of Department of Energy Oversight Policy*. This function is an integral element of the Department's responsibility as a self-regulating agency to provide assurance of its security and safety posture to leadership, workers, and the public. The purpose of this report is to provide an overview of independent oversight activities, findings, and recommendations for Fiscal Year (FY) 2020 to the Committee on Appropriations, as requested in House Report 114-91.

Sixty-eight independent oversight reports for assessments conducted at twenty-six DOE (including National Nuclear Security Administration and Power Marketing Administration) locations were produced in FY 2020. EA did not identify any immediate or major risks that warranted shutdown of operations. Overall, DOE's security and safety programs are consistently fulfilling the objective of protecting workers, the public, and national security, although continued attention and improvement are needed in some areas.

Independent oversight assessment reports are provided to DOE senior managers, applicable DOE program and line managers, contractor managers, and other DOE stakeholder organizations such as the Offices of Environment, Health, Safety and Security; Inspector General; Chief Information Officer; and Intelligence and Counterintelligence to promote improvements in security and safety performance. Recommendations and areas for improvement identified in FY 2020 assessment reports pertain to:

- Improving security risk assessments, analyses, mitigation, and acceptance;
- Fully implementing and adhering to DOE security and safety requirements;
- Improving hazard identification, evaluation, control, and monitoring;
- Enhancing the quality and breadth of assessments, testing, and other contractor assurance functions;
- Improving corrective action and issues management processes;
- Having sufficient federal staffing and expertise for effective contractor oversight; and
- Improving safety, cyber and physical security, and emergency management programs.

This report contains a summary of the DOE Independent Oversight Program, a summary of FY 2020 independent oversight activities, a listing of independent oversight assessment reports completed in FY 2020, and overall conclusions and recommendations.



OFFICE OF ENTERPRISE ASSESSMENTS
FISCAL YEAR 2020
INDEPENDENT OVERSIGHT ACTIVITIES OVERVIEW

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I. Legislative Language

This report fulfills a request from the Committee on Appropriations in House Report 114-91, which accompanied the Energy and Water Development Appropriations Bill, 2016. The request states:

The Office of Independent Enterprise Assessments is directed to continue to provide an annual report of its oversight activities, findings, and recommendations for the previous fiscal year.

II. Independent Oversight Program

The Office of Enterprise Assessments (EA) is responsible for implementing an Independent Oversight Program for security and safety within the U.S. Department of Energy (DOE) in accordance with DOE Orders 227.1A, *Independent Oversight Program*, and 226.1B, *Implementation of Department of Energy Oversight Policy*. To carry out this responsibility, EA conducts independent oversight assessments to identify gaps and vulnerabilities in programs and performance related to safeguards and security, cybersecurity, worker and public health and safety, and emergency management, to assist in the prevention and mitigation of events that could negatively impact workers, the public, the environment, or national security.

EA considers relative risks and past performance in determining the specific oversight activities it conducts. EA independent oversight assessments are designed to complement, not replace, DOE line management's responsibility to monitor and oversee contractor security and safety programs and performance, manage contracts, and conduct self-assessments.

Safeguards and security and cybersecurity independent oversight assessments gauge the effectiveness of security-related policies and programs throughout the Department. These assessments are performed to provide assurance that nuclear weapons and weapons components, special nuclear material, classified matter, and classified and controlled unclassified information are being protected from theft, sabotage, diversion, loss, or unauthorized disclosure. Follow-up assessments are performed to evaluate progress and effectiveness in implementing corrective actions for previously identified issues.

Safeguards and security assessments generally evaluate the functional areas described in EA protocols, which include:

- Program planning and management,
- Personnel security,
- Protective force,
- Physical protection systems,

- Material control and accountability, and
- Information security.

Cyber assessments evaluate foundational cybersecurity program elements such as:

- Risk management,
- Configuration management,
- Contingency planning,
- Continuous monitoring,
- Identity and access management,
- Vulnerability management, and
- Technical implementation (through external and internal penetration testing).

Environment, safety and health (ES&H) independent oversight assessments evaluate nuclear safety, selected facility and worker safety programs, integrated safety management performance, and emergency response capabilities. These assessments are performed to evaluate the adequacy of protection for the public, workers, and the environment, particularly at DOE sites with nuclear facilities or conducting nuclear or radiological activities, and provide feedback to leadership and line management on needed improvements.

ES&H assessment activities focus primarily on:

- Evaluating the status of nuclear safety at DOE nuclear facilities, including the functionality of vital safety systems and other nuclear safety programs and functions;
- Conducting reviews of design and construction of new or significantly modified nuclear facilities;
- Conducting targeted, multi-site nuclear safety reviews of selected focus areas that are of interest due to known performance deficiencies, high risks, or recent changes in requirements, such as the complex-wide assessment of radioactive waste packaging and shipping conducted in FY 2020;
- Evaluating emergency management capabilities at DOE sites with nuclear activities and significant quantities of hazardous materials;
- Conducting reviews of safety programs at sites or within organizations where performance may present significant risk (e.g., less than expected safety performance or serious or recurring incidents or violations of requirements); and
- Evaluating line management feedback and improvement processes.

The Independent Oversight Program assessment processes are described in protocols available on DOE's website¹. The protocols provide a disciplined and consistent approach to monitoring, evaluating, and reporting on the status of security and safety program implementation within

¹<https://www.energy.gov/sites/prod/files/2020/11/f80/Independent%20Oversight%20Program%20Appraisal%20Process%20Protocols%20-%20October%202020.pdf>

DOE. These processes have been developed and refined over time, and tested through repeated use during many different types of assessments.

EA continually strives to improve internal processes to enhance the products and value EA provides to DOE. EA managers routinely solicit feedback from assessment team members and line management personnel, and use that information to improve EA's oversight program and processes.

III. Activities and Findings

EA conducted a broad range of assessments in FY 2020 at sites critical to DOE's missions to evaluate the effectiveness of physical and cybersecurity programs, nuclear safety and worker safety and health programs, and emergency management programs. Some assessments were conducted remotely when onsite appraisal activities were curtailed due to the COVID-19 pandemic. Despite this restriction, the number of assessments completed this fiscal year did not decline.

A major focus of this year's activities was the DOE-wide assessment of radioactive waste packaging and shipping practices, which began in July 2019, and was undertaken at the request of the Deputy Secretary of Energy. EA conducted 16 radioactive waste management assessments at sites across DOE. These assessments culminated in a crosscutting report that collectively analyzed the individual assessments to identify best practices and recommendations intended to promote organizational learning and improved performance throughout DOE. Other safety assessments continued to focus on high-hazard nuclear construction projects and operations at the Hanford Site Waste Treatment and Immobilization Plant, Y-12 National Security Complex Uranium Processing Facility, and Savannah River Site Salt Waste Processing Facility. EA safeguards and security and cybersecurity assessments focused on DOE operations and systems that manage special nuclear material (SNM), classified matter (physical assets and information), and other sensitive assets entrusted to the Department. Extensive performance testing continued to be a key element of most of these assessments. At the request of the Secretary of Energy, EA is also spearheading an effort to collect, analyze, and compile lessons learned and best practices from across DOE in responding to and sustaining critical operations during the pandemic.

The information contained herein is derived from independent oversight assessment reports issued in FY 2020. Reports for individual locations and activities identify best practices, findings, deficiencies and areas for improvement. Crosscut reports, which provide an analysis of results from several locations, identify best practices and recommendations. Some referenced reports pertain to assessments conducted in the latter part of FY 2019. Some assessments conducted in the latter part of FY 2020 are not referenced herein as the assessment reports will not be issued until after FY 2021 has begun.

A. Safeguards and Security Assessments

EA completed sixteen safeguards and security assessments at eleven DOE locations in FY 2020. Eight of the locations possessed Category I quantities of SNM (Category I SNM)². Three assessments were conducted at field intelligence elements and two at special access program (SAP) locations. The table at the end of this section identifies the locations of these assessments, except for the field intelligence element and SAP assessments.

Safeguards and security assessments evaluated the adequacy of security programs in protecting Category I SNM; special access, national security and intelligence information; and other national security assets. This was accomplished primarily by performing comprehensive multi-topic assessments that included large-scale performance testing (force-on-force exercises), and limited-notice performance testing. The ability to plan and conduct realistic tests of site response capabilities was routinely evaluated during these assessments.

Assessment results indicate that sites are providing the requisite protection to DOE security interests using layered protection measures that include intrusion detection systems and delay barrier systems (e.g., perimeter fencing, vehicle barriers, and vaults). Force-on-force and limited-notice performance testing demonstrated that well-trained and equipped protective forces provide timely response to postulated malevolent events such as an armed attack, the introduction of contraband into security areas, and the attempted theft of SNM. Performance testing also demonstrated that sites are improving internal testing processes and that physical security systems for intrusion detection, security portal screening, and vehicle containment are functioning as intended. Although sites are conducting realistic performance tests, attention to command and control is warranted so that tests are conducted safely and provide meaningful data. Safeguards and security assessment results also indicate that continued management attention is needed to: improve the analytical bases for establishing site security programs to reflect current operations and support management of risks, complete implementation of the 2016 Design Basis Threat Order (DOE Order 470.3C), and strengthen federal oversight processes to appropriately and adequately review all security elements.

EA assessments of information security indicate that DOE organizations are controlling and protecting classified information and have established effective access authorization programs to verify individual eligibility for access to particular types and categories of classified matter. Sites have implemented effective operations security programs to identify and protect critical information, and instituted equipment and procedural improvements so that that classified matter is transmitted and destroyed properly. Several programs were found to be non-compliant with the requirements of DOE Order 470.6, *Technical Security Program*.

² Category I SNM means, in any combination, a quantity of: (1) 2 kg or more of plutonium, 5 kg or more of U-235 (contained in uranium enriched to 20 percent or more in the U-235 isotope), or 2 kg or more of U-233 (DOE Order 474.2) or (2) 5 kg or more in any combination computed by the equation $\text{grams} = (\text{grams contained U-235}) + 2.5 (\text{grams U-233} + \text{grams plutonium})$ (10 CFR Part 74). The latter is referred to as a formula quantity.

B. Cybersecurity Assessments

EA completed twelve cybersecurity assessments at ten DOE locations and four crosscut assessments in FY 2020. Three of these assessments were conducted at field intelligence elements. EA also evaluated the technical controls protecting two Power Marketing Administration supervisory control and data acquisition (SCADA) development systems. The table at the end of this section identifies the locations of these assessments, except for the field intelligence element assessments.

Cybersecurity assessments evaluated the maturity and effectiveness of the risk management programs and technical security controls applied to protect classified and unclassified networks, applications, and information. EA operated a cybersecurity testing network to conduct announced penetration tests of networks to evaluate internal and external threats, and unannounced penetration tests to identify potential pathways that could expose DOE networks to cyberattack. In addition, EA developed a new testing tool for an assessment team to conduct internal network scanning before arriving on site. This capability can also be used to supplement an onsite assessment team with remote experts in a particular technology if needed. The tool proved to be very useful for conducting scans and penetration tests remotely during the COVID-19 pandemic travel restrictions.

Assessment results indicate that sites are continuing to improve cybersecurity risk management programs and supporting processes. Cybersecurity programs for classified networks and information are generally well-managed and provide adequate protection to the systems and information processed on the classified resources. Improvement is needed in configuration management and intrusion detection processes. Effective protection of unclassified systems and networks varied among the assessed sites, with improvement needed in security control testing, continuous monitoring, intrusion detection, authority to operate, program documentation, and management of all known risks.

C. Nuclear Safety and Environment Assessments

EA completed twenty-seven nuclear safety assessments at sixteen DOE locations and two crosscut assessments in FY 2020. The table at the end of this section identifies the locations of these assessments. Sixteen of these assessments were associated with a DOE-wide review of radioactive waste packaging and shipping practices that culminated in a crosscut report of the results of the individual site assessments. Overall, DOE radioactive waste management requirements, programs, and activities were found to be generally adequate. The crosscut report identifies a number of best practices and makes several recommendations for improvement.

EA assessed the effectiveness of federal and contractor efforts to monitor and improve safety culture at eight DOE sites. The resulting crosscut assessment identified the need for improvements in contractor programs and federal oversight.

Other nuclear safety assessments focused on evaluating the implementation of nuclear safety management programs, development and implementation of safety bases for nuclear facilities, construction quality and startup activities for major nuclear design and construction projects, conduct of operations, contractor assurance and issues management systems, and federal oversight of contractor operations. Assessment results indicate that processes and procedures established to fulfill nuclear facility safety management functions (e.g., operations, maintenance, and engineering) are well-developed and effectively implemented, and safety systems at operating nuclear facilities continue to be well-maintained and managed such that the systems perform the intended safety functions. Most federal oversight processes were found to be effective in monitoring and evaluating contractor performance, however, assessment results indicate continuing weaknesses in contractor processes for capturing, analyzing, resolving, and tracking deficiencies. Targeted assessments of issues management are planned through FY 2021.

D. Worker Safety and Health Assessments

EA completed three worker safety and health assessments and one crosscut assessment of lessons learned in FY 2020. The table at the end of this section identifies the locations of these assessments.

Worker safety and health assessments focused on the effectiveness of site work planning and control systems to establish controls to protect workers from hazards at DOE facilities. The assessments also evaluated the contractor assurance and federal oversight practices for these systems.

Assessment results indicate that appropriate frameworks have been established to support effective work planning and control processes, but fundamental weaknesses in implementing these processes persist. EA continues to observe common weaknesses in clearly defining the work scope, identifying and analyzing work activity hazards, implementing job-specific hazard controls, and performing work within the designated controls.

E. Emergency Management Assessments

EA completed three emergency management assessments in FY 2020. The table at the end of this section identifies the locations of these assessments.

Emergency management assessments evaluated emergency management program elements, along with exercise programs and response organization performance as demonstrated during major site exercises. Assessments also evaluated actions taken to rectify weaknesses identified in prior assessment reports.

Assessment results indicate that sites generally have well-developed and effectively implemented emergency management programs, and exercise observations revealed high levels of proficiency in implementing some response elements. Nonetheless, the assessments

revealed some areas of weakness, including common weaknesses in exercise effectiveness, emergency response organization (ERO) communications, ERO proficiency, and issues management and corrective action processes.

F. EA FY 2020 Independent Oversight Assessments by DOE Location / Entity

	Safeguards & Security	Cybersecurity	Nuclear Safety & Environment	Worker Safety & Health	Emergency Management
NATIONAL NUCLEAR SECURITY ADMIN.					
Eight Locations	4	2	11	1	2
SCIENCE and ENERGY					
Argonne National Lab.		1			
Idaho National Lab.	1		2	1	
Oak Ridge National Lab.	1		1		
Pacific Northwest National Lab.	1		1	1	
Princeton Plasma Physics Lab.		1			
Thomas Jefferson National Accel. Lab.		1			
ENVIRONMENTAL MANAGEMENT					
Carlsbad Field Office			1		
Hanford Site	1		5		
Idaho Clean-up Project			1		
Oak Ridge Reservation			1		
Paducah Gaseous Diffusion Plant	1				
Portsmouth Gaseous Diffusion Plant			1		1
Savannah River Site	2		2		
West Valley Demonstration Project			1		
BONNEVILLE POWER ADMIN.		1			
WESTERN AREA POWER ADMIN.		1			
DOE Headquarters	1	1			
Office of Legacy Management		1			
Nuclear Fuel Services, Inc.			1		
Field Intelligence Elements	3	3			
Crosscut/Lessons Learned Assessments		4	2	1	

IV. Independent Oversight Reports Listing

This section contains a list of independent oversight assessment reports issued in FY 2020 in chronological order by discipline. Reports identified in the safeguards and security and cybersecurity sections contain classified and controlled unclassified information and, therefore, are not available to the public. Report titles for assessments of special access programs and Office of Intelligence and Counterintelligence field intelligence elements are not identified in this report or on the EA website. The nuclear safety and environment, worker safety and health, and emergency management report titles link to the corresponding reports on the EA website.

A. Safeguards and Security

1. Results of Limited-Notice Performance Tests at the Oak Ridge National Laboratory, October 15, 2019
2. Results of Limited-Notice Performance Tests at the Department of Energy Headquarters Buildings, December 5, 2019
3. Office of Security Assessments Safeguards and Security Assessment at the Los Alamos National Laboratory, December 9, 2019
4. Results of Limited-Notice Performance Tests at the Savannah River Site, December 12, 2019
5. Office of Enterprise Assessments Safeguards and Security Assessment at the Pacific Northwest National Laboratory, December 16, 2019
6. Results of Office of Safeguards and Security Assessments Limited-Notice Performance Tests at the Nevada National Security Site, December 17, 2019
7. Results of the Office of Safeguards and Security Assessments Limited-Notice Performance Tests at the Hanford Site, January 22, 2020
8. Results of the Office of Safeguards and Security Assessments Limited-Notice Performance Tests at the Paducah Gaseous Diffusion Plant, January 16, 2020
9. Results of the Office of Safeguards and Security Assessments Limited-Notice Performance Tests at the Idaho National Laboratory, February 18, 2020
10. Safeguards and Security Follow-Up Assessment at the Nevada National Security Site, July 31, 2020
11. Safeguards and Security Assessment at the Savannah River Site and the Savannah River Tritium Enterprise, September 21, 2020

B. Cybersecurity

1. Independent Evaluation of the U.S. Department of Energy Office of Intelligence and Counterintelligence Information Systems Security Program, October 2019
2. Independent Evaluation of the U.S. Department of Energy's Information Security Program for National Security Systems, October 2019
3. Independent Technical Assessment of the Argonne Biomedical Learning Enclave at the Argonne National Laboratory, November 2019
4. Unannounced Independent Cybersecurity Assessment of the Western Area Power Administration, December 2019

5. Independent Programmatic and Technical Assessment of the Thomas Jefferson National Accelerator Facility Unclassified Cybersecurity Program, December 2019
6. Independent Programmatic and Technical Assessment of the Office of Legacy Management Unclassified Cybersecurity Program, January 2020
7. Independent Technical Assessment of the Princeton Plasma Physics Laboratory Unclassified Cybersecurity Program, February 2020
8. Independent Programmatic and Technical Assessment of the National Nuclear Security Administration Sandia National Laboratories Cybersecurity Program, February 2020
9. Independent Programmatic and Technical Assessment of the Bonneville Power Administration Unclassified Cybersecurity Program, April 2020
10. Limited Programmatic and Technical Assessment of the Unclassified Emergency Communications Network, May 2020
11. Independent Programmatic and Technical Assessment of the Lawrence Livermore National Laboratory Classified and Unclassified Cybersecurity Program, May 2020
12. Independent Evaluation of The U.S. Department of Energy's Information Security Program for National Security Systems, September 2020
13. Independent Evaluation of the U.S. Department of Energy Office of Intelligence and Counterintelligence Information Systems Security Program, September 2020

C. Nuclear Safety and Environment

1. [Conduct of Operations Assessment at the West Valley Demonstration Project – November 2019](#)
2. [Assessment of Issues Management at the Hanford Site Waste Treatment and Immobilization Plant – November 2019³](#)
3. [Assessment of Radioactive Waste Management at the Savannah River Site Interim Report – December 2019](#)
4. [Assessment of Radioactive Waste Management at the Lawrence Livermore National Laboratory Interim Report – December 2019](#)
5. [Construction Quality – Structural Concrete Placement and Structural Steel Procurement Assessment at the Y-12 National Security Complex Uranium Processing Facility – December 2019³](#)
6. [Conduct of Maintenance Assessment at Sandia National laboratories/New Mexico – December 2019](#)
7. [Assessment of Radioactive Waste Management at the Idaho National Laboratory – December 2019](#)
8. [Assessment of Radioactive Waste Management at Sandia National Laboratories New Mexico – December 2019](#)
9. [Assessment of Radioactive Waste Management at the Los Alamos National Laboratory – December 2019](#)
10. [Assessment of Radioactive Waste Management at the Idaho Cleanup Project Interim Report – February 2020](#)
11. [Assessment of the Safety Basis Corrective Action Plan Implementation at the Pantex Plant – March 2020](#)
12. [Assessment of Radioactive Waste Management at the Knolls Atomic Power Laboratory and the Kesselring Site – March 2020](#)

³ High-hazard nuclear construction project assessment.

13. [Assessment of Radioactive Waste Management at the Hanford Site and the Pacific Northwest National Laboratory – March 2020](#)
14. [Assessment of Radioactive Waste Management at the Portsmouth Site – March 2020](#)
15. [Assessment of Radioactive Waste Management at the Oak Ridge National Laboratory – April 2020](#)
16. [Assessment of Radioactive Waste Management at the Y-12 National Security Complex Interim Report – April 2020](#)
17. [Assessment of Transuranic Waste Management at the Los Alamos National Laboratory – April 2020](#)
18. [Assessment of the Radioactive Waste Certification Program at Nuclear Fuel Services, Inc. for Shipments to U.S. Department of Energy Sites](#)
19. [Assessment of Radioactive Waste Management at the Nevada National Security Site Interim Report – April 2020](#)
20. [Assessment of Radioactive Waste Management at the Oak Ridge Reservation Environmental Management Projects – April 2020](#)
21. [Assessment of Carlsbad Field Office Oversight of Transuranic Radioactive Waste Management Programs Revised Interim Report – April 2020](#)
22. [Preliminary Documented Safety Analysis Assessment at the Hanford Site Tank Farms Tank Side Cesium Removal Project – April 2020](#)
23. [Safety Basis Training and Qualification Assessment at the Hanford Site – May 2020](#)
24. [Safety Basis Assessment at the Savannah River Tritium Facility – May 2020](#)
25. [Federal Operational Readiness Review Assessment at the Savannah River Site Salt Waste Processing Facility – May 2020⁴](#)
26. [Safety Basis Assessment at the Hanford Site Waste Treatment and Immobilization Plant Low-Activity Waste Facility – May 2020⁴](#)
27. [Assessment of Safety Culture Sustainment Processes at U.S. Department of Energy Sites – June 2020](#)
28. [Enterprise-wide Assessment of the Department of Energy's Packaging and Shipping of Radioactive Waste – July 2020](#)
29. [Conceptual Safety Design Assessment Report for the Versatile Test Reactor – September 2020](#)

D. Worker Safety and Health

1. [Work Planning and Control Assessment at the Idaho National Laboratory – October 2019](#)
2. [Lessons Learned from Assessments of Work Planning and Control at U.S. Department of Energy Laboratories – December 2019](#)
3. [Pressure Safety Assessment at the Pacific Northwest National Laboratory – February 2020](#)
4. [Work Planning and Control Assessment at the Lawrence Livermore National Laboratory – August 2020](#)

E. Emergency Management

1. [Emergency Management Exercise Assessment at the Y-12 National Security Complex – December 2019](#)
2. [Office of Enterprise Assessments Emergency Management Exercise Assessment at the Portsmouth Gaseous Diffusion Plant – February 2020](#)
3. [Emergency Management Assessment at the Los Alamos National Laboratory – August 2020](#)

⁴ High-hazard nuclear construction project assessment.

V. Conclusions and Recommendations

EA produced sixty-eight independent oversight reports documenting security and safety assessments conducted at twenty-six DOE (including National Nuclear Security Administration and Power Marketing Administration) locations in FY 2020. EA did not identify any immediate or major risks that warranted shutdown of operations. Overall, DOE's security and safety programs are effective, and consistently fulfill the critical functions of protecting workers, the public, and national security, although continued attention and improvement are needed in some areas.

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- Enhancing the quality and breadth of assessments, testing, and other contractor assurance functions;
- Improving corrective action and issues management processes;
- Having sufficient federal staffing and expertise for effective contractor oversight; and
- Improving safety, cyber and physical security, and emergency management programs.