

EVALUATION REPORT

Inspector General's Assessment of the
Most Serious Management and Performance
Challenges Facing NRC

OIG-13-A-01 October 1, 2012



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UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

**OFFICE OF THE
INSPECTOR GENERAL**

October 1, 2012

MEMORANDUM TO: Chairman Macfarlane

FROM: Hubert T. Bell */RA/*
Inspector General

SUBJECT: INSPECTOR GENERAL'S ASSESSMENT OF THE MOST
SERIOUS MANAGEMENT AND PERFORMANCE
CHALLENGES FACING NRC (OIG-13-A-01)

The *Reports Consolidation Act of 2000* requires the Inspector General of each Federal agency to annually summarize what he or she considers to be the most serious management and performance challenges facing the agency and to assess the agency's progress in addressing those challenges. In accordance with the act, I identified seven management and performance challenges confronting the Nuclear Regulatory Commission that I consider to be the most serious.

We appreciate the cooperation extended to us during this evaluation. If you have any questions, please contact Stephen D. Dingbaum, Assistant Inspector General for Audits, at 415-5915 or me at 415-5930.

Attachment: As stated

EXECUTIVE SUMMARY

BACKGROUND

The *Reports Consolidation Act of 2000* requires Federal agency Inspectors General (IG) to annually summarize what they consider to be the most serious management and performance challenges facing their agency and to assess the agency's progress in addressing those challenges.

OBJECTIVE

In accordance with the act, the IG at the U.S. Nuclear Regulatory Commission (NRC) updated what he considers to be the most serious management and performance challenges facing NRC. The IG considered the overall work of the Office of the Inspector General (OIG), the OIG staff's general knowledge of agency operations, and other relevant information to develop and update his list of management and performance challenges and assess the agency's progress in addressing the challenges. In addition, OIG staff sought input from NRC's Chairman, Commissioners, and management to obtain their views on what challenges the agency is facing and what efforts the agency has taken or are underway or planned to address previously identified management and performance challenges.

RESULTS IN BRIEF

The IG identified seven challenges that he considers the most serious management and performance challenges facing NRC. The challenges identify critical areas or difficult tasks that warrant high-level management attention.

The following chart provides an overview of the seven most serious management and performance challenges facing NRC as of October 1, 2012.

Most Serious Management and Performance Challenges Facing the Nuclear Regulatory Commission as of October 1, 2012* <i>(as identified by the Inspector General)</i>	
Challenge 1	<i>Management of regulatory processes to meet a changing environment in the oversight of nuclear materials.</i>
Challenge 2	<i>Management of internal NRC security and oversight of licensee security programs.</i>
Challenge 3	<i>Management of regulatory processes to meet a changing environment in the oversight of nuclear facilities.</i>
Challenge 4	<i>Management of issues associated with the safe storage of high-level radioactive waste when there is no long-term disposal solution.</i>
Challenge 5	<i>Management of information technology.</i>
Challenge 6	<i>Administration of all aspects of financial management and procurement.</i>
Challenge 7	<i>Management of human capital.</i>
<p><i>*The most serious management and performance challenges are not ranked in any order of importance.</i></p>	

CONCLUSION

The seven challenges contained in this report are distinct, yet interdependent relative to the accomplishment of NRC's mission. For example, the challenge of managing human capital affects all other management and performance challenges.

The agency's continued progress in taking actions to address the challenges presented should facilitate achieving the agency's mission and goals.

ABBREVIATIONS AND ACRONYMS

CUI	controlled unclassified information
CUIO	controlled unclassified information office
FAIMIS	Financial Accounting and Integrated Management Information System
FY	fiscal year
IG	Inspector General
ISFSI	independent spent fuel storage installation
IT	information technology
NRC	U.S. Nuclear Regulatory Commission
OIG	Office of the Inspector General
OMB	Office of Management and Budget
SGI	safeguards information
SDP	significance determination process
SUNSI	sensitive unclassified non-safeguards information

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I. BACKGROUND

On January 24, 2000, Congress enacted the *Reports Consolidation Act of 2000*, requiring Federal agencies to provide financial and performance management information in a more meaningful and useful format for Congress, the President, and the public. The act requires the Inspector General (IG) of each Federal agency to annually summarize what he or she considers to be the most serious management and performance challenges facing the agency and to assess the agency's progress in addressing those challenges.

II. OBJECTIVE

In accordance with the Reports Consolidation Act of 2000, the U.S. Nuclear Regulatory Commission (NRC) IG updated what he considers to be the most serious management and performance challenges facing the agency. The IG considered the overall work of the Office of the Inspector General (OIG), the OIG staff's general knowledge of agency operations, and other relevant information to develop and update his list of management and performance challenges and assess the agency's progress in addressing these challenges.

In addition, OIG staff sought input from NRC's Chairman, Commissioners, and management to obtain their views on what challenges the agency is facing and what efforts the agency has taken or are underway or planned to address previously identified management and performance challenges. Appendix A contains additional information on the evaluation scope and methodology.

III. EVALUATION RESULTS

The NRC's mission is to license and regulate the Nation's civilian use of byproduct, source, and special nuclear materials to ensure adequate protection of public health and safety, promote the common defense and security, and protect the environment. Like other Federal agencies, NRC faces management and performance challenges in carrying out its mission.

Determination of Management and Performance Challenges

Congress left the determination and threshold of what constitutes a most serious management and performance challenge to the discretion of the IGs. As a result, the IG applied the following definition in identifying challenges:

Serious management and performance challenges are mission critical areas or programs that have the potential for a perennial weakness or vulnerability that, without substantial management attention, would seriously impact agency operations or strategic goals.

Based on this definition, in 2012, the IG assessed the most serious management and performance challenges facing NRC and identified seven challenges that he considered most serious. The challenges identify critical areas or difficult tasks that warrant high-level management attention. (See Appendix B of this report for a discussion of the changes between the 2011 list of challenges and the current list.)

The following chart provides an overview of the seven most serious management and performance challenges as of October 1, 2012.

Most Serious Management and Performance Challenges Facing the Nuclear Regulatory Commission as of October 1, 2012*
(as identified by the Inspector General)

Challenge 1	<i>Management of regulatory processes to meet a changing environment in the oversight of nuclear materials.</i>
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Challenge 6	<i>Administration of all aspects of financial management and procurement.</i>
Challenge 7	<i>Management of human capital.</i>

****The most serious management and performance challenges are not ranked in any order of importance.***

CHALLENGE 1

Management of regulatory processes to meet a changing environment in the oversight of nuclear materials.

Overview

NRC is responsible for maintaining an established regulatory framework for the safe and secure use of nuclear materials; medical, industrial, and academic applications; uranium recovery activities; and low-level radioactive waste sites. NRC is authorized to grant licenses for the possession and use of radioactive materials and establish regulations to govern the possession and use of those materials. Agency regulations require that certain material licensees have extensive material control and accounting programs as a condition of their licenses. Other license applicants (including those requesting authorization to possess small quantities of special nuclear materials¹) must develop and implement plans that demonstrate a commitment to accurately control and account for radioactive materials. Upon a State's request, NRC may enter into an agreement to relinquish its authority to the State to regulate certain radioactive materials and limited quantities of special nuclear material. The State must demonstrate that its regulatory program is adequate to protect public health and safety and compatible with NRC's program. The States that enter into an agreement assuming this regulatory authority from NRC are called Agreement States. Currently, there are 37 Agreement States.

¹ Special nuclear material, as defined by Title 1 of the Atomic Energy Act of 1954, is plutonium, uranium-233, or uranium enriched in the isotopes uranium-233 or uranium-235.

Issues

- Ensure appropriate oversight of radioactive material. This includes the implementation of the National Source Tracking System, Web Based Licensing, and the Licensing Verification System to ensure the accurate tracking and control of byproduct material, especially those materials with the greatest potential to impact public health and safety.
- Ensure that radioactive material is adequately protected to preclude its use for malicious purposes.
- Ensure appropriate oversight of nuclear materials used in medicine.
- Ensure reliable accounting of special nuclear materials in the NRC and Department of Energy jointly managed Nuclear Materials Management and Safeguards System.
- Ensure the appropriate oversight of uranium recovery facilities. The Department of Energy is responsible for cleanup and remediation of these sites under an NRC general license.
- Ensure the management and safe storage and disposal of low-level radioactive waste produced as a result of NRC-licensed activities. All current low-level waste disposal sites are regulated by Agreement States.
- Ensure that Agreement State programs are adequate to protect public health and safety and the environment, and are compatible with NRC's program.

Assessment

During FY 2012, OIG audited several areas dealing with NRC's oversight of nuclear materials. Regarding NRC's oversight of industrial radiography, OIG found four distinct areas where NRC could improve. OIG found that radiography licenses do not clearly or consistently indicate what activities licensees are authorized to conduct or where they may conduct them, the

agency's inspection program guidance lacks needed specificity, temporary job site inspections are not being conducted as often as possible, and NRC has an inconsistent approach for inspecting NRC licensee facilities in Agreement States.

OIG conducted two audits concerning general licenses. In its first audit, OIG identified that general licensed devices could contain dangerous radioactive sources even though persons with no radiation training or experience were allowed to operate the devices. In the second audit, OIG found that many general licensees are unaware of NRC's regulatory requirements for general licensed devices increasing the probability that accountability of such devices will decrease, placing public health and safety and the environment at risk.

Since FY 2003, OIG has been tracking NRC's progress regarding the reliable accounting of special nuclear materials. While the agency has made some progress, it still needs to conduct periodic inspections to verify that material licensees comply with material control and accounting requirements as well as document the basis of the approach used to risk inform NRC's oversight of material control and accountability activities for all types of materials licensees.

During FY 2012, OIG's audit on the oversight of uranium recovery facilities disclosed two opportunities for more effective oversight. OIG found that the agency needs to improve its compliance with the terms of the site-specific memoranda of understanding it has with the Environmental Protection Agency and NRC needs to reduce its reliance on the Department of Energy's inspection program to alert NRC to problems at decommissioned uranium recovery sites in Department of Energy custody.

During FY 2012, OIG reviewed and found acceptable the agency's implementation and availability of the National Enforcement Database Web Site, which provides a standardized data collection process that can be used as the basis for an information sharing tool among NRC and Agreement States.

Appendix C provides a list of OIG FY 2012 reports relevant to this challenge and examples of agency actions addressing the challenge.

CHALLENGE 2

Management of internal NRC security and oversight of licensee security programs.

Overview

NRC must remain vigilant of the security of its own infrastructure and that of nuclear facilities and nuclear material. Ensuring predictability in the security environment is an ongoing challenge for NRC. NRC must continue to use robust, proactive measures to protect its infrastructure – the buildings, personnel, and information – from both internal and external threats. Moreover, as the nature of the threat continues to evolve, NRC faces challenges with protecting nuclear facilities and materials, the constant sharing of sensitive information, as well as emergency preparedness and incident response.

Issues

- Review and strengthen internal physical and information security programs to protect NRC assets (e.g., NRC headquarters and regional facilities, safeguards and classified information, and information systems).
- Manage information in accordance with new Federal Government policies for designating, marking, safeguarding, and disseminating controlled unclassified information (CUI).
- Review and strengthen physical and cyber security inspection programs to protect licensee owned assets (e.g., facility designs, technology descriptions, dual use material and components, safeguards and classified information) from compromise.
- Review nuclear power plant emergency preparedness oversight.

Assessment

During FY 2012, OIG auditors found that while NRC has made improvements to the safeguards information (SGI) program, NRC lacked a structured process for tracking SGI releases, lacked guidance on granting

“outsiders” access to SGI, and had inadequate business processes over the SGI designator role. OIG also found that while the information systems security program has improved, the agency’s plan of action and milestones still needs improvement, the agency has not developed an organization-wide risk management strategy, and configuration management procedures are not consistently implemented.

OIG found sensitive unclassified non-safeguards information (SUNSI)² on an NRC shared drive. NRC has not yet fully implemented quality assurance checks following network upgrades to ensure that access controls are preserved in shared network drives that process documents containing SUNSI/CUI.

OIG identified that a more systematic approach to analyzing security findings data beyond the regional level can help NRC staff better identify licensee performance trends. Further, periodic reviews of the significance determination process (SDP) assessment tools and systemic testing of new and revised SDP assessment tools can help staff apply SDP assessment tools in a more transparent and consistent manner.

As part of issue area monitoring, OIG reviewed the agency’s cyber security roadmap to understand the status of the staff’s approach for evaluating cyber security at power reactor licensees and combined operating license applicants.

An OIG investigation completed during FY 2012 concerning a contractor’s mishandling of NRC employee personally identifiable information (PII) identified a shortcoming in NRC’s contractual arrangement for the contractor to routinely provide PII to the Office of Personnel Management. OIG determined that the contractual arrangement did not adequately address the retention and destruction of NRC employee PII data.

Appendix C provides a list of OIG FY 2012 reports relevant to this challenge and examples of agency actions addressing the challenge.

² SUNSI is any information of which the loss, misuse, modification, or unauthorized access can reasonably be foreseen to harm the public interest, the commercial or financial interests of the entity or individual to whom the information pertains, the conduct of NRC and Federal programs, or the personal privacy of individuals. SUNSI includes allegation information, security-related information, Privacy Act information, among others. SUNSI will be included under the new CUI categorization of Government information.

CHALLENGE 3

Management of regulatory processes to meet a changing environment in the oversight of nuclear facilities.

Overview

NRC faces the challenge of maintaining its core regulatory programs while adapting to changes in its regulatory environment. NRC must address a highly variable interest in licensing and constructing new nuclear power plants to meet the Nation's increasing demands for energy production. As of July 2012, NRC had received 18 Combined License applications, 10 of which NRC was actively reviewing. Moreover, the agency is reviewing two standard design certifications and, for advanced reactors, expects to receive two design certification applications and one construction permit application through 2014.

While responding to the emerging demands associated with licensing and regulating new reactors, NRC must maintain focus and effectively carry out its current regulatory responsibilities, such as inspections of the current fleet of operating nuclear reactors and fuel cycle facilities. NRC intends to increase its safety focus on licensing and oversight activities through risk-informed and performance-based regulation.

Further, the U.S. Court of Appeals for the District of Columbia Circuit ruled in June 2012 that NRC's waste-confidence decision had not adequately addressed all environmental effects and thus violated the National Environmental Policy Act. In September 2012, the Commission directed the NRC staff to develop, within the next 24 months, an environmental impact statement, a revised waste confidence decision, and a rule on the temporary storage of spent nuclear fuel. While agency staff believe that the license application review activities and ongoing plant construction will not be delayed by the court ruling, the ultimate impact on final licensing decisions and new construction approvals is yet to be determined.

Issues

New Facilities

- Implement the new Construction Inspection Program.
 - Risk-inform Construction Inspection Program activities to ensure the safe operation of newly constructed nuclear facilities.
 - Ensure that the NRC staff has the necessary knowledge and skill to successfully implement the program.
- As the public's demand for new energy sources continues, NRC must ensure that the process for reviewing applications for new facilities focuses on safety and effectiveness.
- As the sources of manufactured reactor components become more globalized, NRC must ensure that its regulations and oversight activities appropriately address the challenges associated with licensees procuring components from suppliers located outside the United States.

Existing Fleet

- Ensure that NRC maintains the ability to effectively review licensee applications for license renewals and power uprates submitted by industry in response to the Nation's increasing demands for energy production.
- Respond to a heightened public focus on license renewals resulting in contested hearings.
- Ensure the ability to identify emerging operating and safety issues at all plants, including issues associated with license renewal and power uprates; consistently apply regulatory and review changes in response to these emerging issues across the existing fleet of reactors.

- Establish and maintain effective, stable, and predictable regulatory programs or policies for all programs.

Cross-Cutting Issues

- Systematically identify and develop, and consistently implement internal controls to ensure effectiveness and efficiency of agency operations and resources.
- Identify and improve weak, informal, or unstructured processes to facilitate effective, efficient, and consistent staff activities.
- Improve the clarity, consistency, and comprehensiveness of guidance for NRC staff such as the *Inspection Manual* and inter/intra-office guidance.

Assessment

During FY 2012, OIG auditors identified a variety of needs related to new facility construction oversight:

- *Guidance and training:* OIG found that the agency did not have formal guidelines governing the use of key documents used in construction inspection, and had not established procedures for updating the key documents and communicating the changes to agency stakeholders. NRC also lacked guidance for some types of inspection activity and needed to clarify stakeholder roles and responsibilities. Furthermore, NRC needs to design construction inspection training programs through a formalized needs assessment to ensure that agency staff is receiving appropriate and useful training.
- *Inspection activity tracking:* OIG found that one of the agency's database tools to document new reactor construction activities suffered from development delays and inaccurate cost accounting. The agency needs to take specific steps to improve oversight of

development of the database.

- *Manufactured reactor components:* OIG found that NRC has not developed a formal strategy for evaluating what inspections are necessary at modular assembly facilities located away from the plant construction site. Furthermore, NRC needs to develop an interoffice inspection coordination strategy to ensure appropriate inspections of modular systems, structures, and components assembled or manufactured offsite.
- *Interoffice coordination:* OIG found a lack of sustained coordination both within headquarters and between headquarters and Region II for new-construction program related activities and interactions. These problems would have been minimized if NRC had in place formalized change management processes to address communications and coordination problems in a changing environment.

With regard to the existing fleet, OIG auditors concurred with agency proposals in response to OIG recommendations to clarify the guidance regarding the process the agency uses to track licensee commitments. OIG auditors also noted improvements the agency made to its nuclear component vendor oversight program, including vendor inspection planning, communications with vendors, and agencywide coordination in monitoring for and evaluating counterfeit, fraudulent, and suspect nuclear components. However, OIG auditors found weaknesses in NRC's guidance and compliance with the guidance for the issuance of confirmatory action letters, a regulatory tool for confirming a licensee's agreement to take certain actions to remove significant concerns about health and safety, safeguards, or the environment. NRC needs a centralized control point for agencywide oversight and implementation of a fully effective confirmatory action letter process.

Appendix C provides a list of OIG FY 2012 reports relevant to this challenge and examples of agency actions addressing the challenge.

CHALLENGE 4

Management of issues associated with the safe storage of high-level radioactive waste when there is no long-term disposal solution.

Overview

NRC regulates high-level radioactive waste generated from commercial nuclear power reactors. High-level radioactive waste is either spent (used) reactor fuel when it is accepted for disposal or waste materials remaining after spent fuel is reprocessed. Because of its highly radioactive fission products, high-level radioactive waste must be handled and stored with care. Since the only way radioactive waste finally becomes harmless is through decay, which for high-level waste can take hundreds of thousands of years, the waste must be stored and finally disposed of in a way that provides adequate protection of the public for a very long time.

The United States has entered a period where the national policy for storing, reprocessing, and disposal of spent nuclear fuel is being reexamined. With the prospect of spent nuclear fuel being stored at reactor sites for the foreseeable future due to the uncertainty surrounding a permanent repository for high-level radioactive waste, NRC has been reviewing the issues associated with long-term storage. An independent spent fuel storage installation (ISFSI) is an NRC-licensed facility designed and constructed for the interim storage of spent nuclear fuel and other radioactive materials associated with the spent fuel. An ISFSI typically consists of a concrete storage pad, storage containers (casks), and any support facilities. As of August 2012, there were ISFSIs storing spent nuclear fuel or preparing to store spent nuclear fuel in the near term at 62 different locations across the United States. Of these ISFSI sites, 52 were located at operating reactors and the remaining 10 were located away from an operating reactor.

In 2010, NRC updated its Waste Confidence Decision—affirming that spent nuclear fuel could be safely stored onsite at nuclear power plants until a permanent waste repository is built. However, in June 2012, the U.S. Court of Appeals for the District of Columbia Circuit ruled that NRC's waste-confidence decision had not adequately addressed all environmental effects and thus violated the National Environmental Policy

Act. The Commission affirmed that the agency will not issue licenses dependent upon the Waste Confidence Decision until the court's remand is appropriately addressed.

Issues

- Ensure safe and secure interim storage for increasing quantities of high-level radioactive waste for the foreseeable future until a permanent repository for high-level radioactive waste is operational.
- Address regulatory issues relative to a longer-than-anticipated time for interim storage of high-level waste.
- Maintain flexibility to address regulatory challenges related to the storage and transportation of spent nuclear fuel and high-level waste.

Assessment

In FY 2011, OIG audited the safety aspect of NRC's oversight of ISFSIs and identified areas where the agency could improve. OIG found that there is no formalized agencywide training program for ISFSI safety inspectors. When ISFSI safety inspectors do not have a consistent understanding of agency inspection requirements, oversight can be compromised. Specifically, there is an increased potential for inadequate inspections to occur, which could result in an increased risk to public health and safety. In response to OIG's finding, NRC is developing training for ISFSI safety inspectors. OIG also found that the period between routine ISFSI inspections varies among regions from 1 to almost 6 years. The inspection frequencies vary because the frequency required to conduct routine ISFSI inspections is not clearly defined. Routine ISFSI safety inspections could be delayed indefinitely without clearly defined inspection frequency guidance, potentially increasing the risk to public health and safety. In response to OIG's finding, NRC staff is revising its inspection manual establishing a minimum frequency for conducting routine ISFSI safety inspections.

Appendix C provides a list of OIG FY 2012 reports relevant to this challenge and examples of agency actions addressing the challenge.

CHALLENGE 5

Management of information technology.

Overview

NRC needs to continue upgrading and modernizing its information technology (IT) capabilities to meet its IT/information management strategic goals. These goals include ensuring NRC staff have quick and easy access to information, providing IT solutions that are easy to use and increase agency program performance, and delivering excellent service.

Issues

- Upgrade or adopt information technology activities to improve the productivity, efficiency, and effectiveness of agency programs and operations.
- Expand mobile computing – “working from anywhere” – options such as remote access from NRC-issued laptops, non-NRC computers, and hand-held devices including a “bring your own devices” pilot program to allow for the distributed work locations of NRC staff.
- Improve information retrieval with better categorization and organization, enterprise content management, and improved search capabilities.
- Enhance “working with anyone” capabilities to include virtual meeting and collaboration tools with internal and external stakeholders including licensees and the public.

Assessment

As part of the OIG's Issue Area Monitor program,³ OIG reviewed the agency's pilot program for Quick Response codes. Quick Response code is a two-dimensional code that has fast readability and large storage capacity compared to standard barcodes. In August 2011, Region III

³ Under the Issue Area Monitor Program, OIG staff assigned to various issue areas monitor agency performance on these management challenges.

began implementing a 3-month initiative to evaluate the feasibility and effectiveness of using Quick Response codes. Region III concluded that the continued use of Quick Response codes would be of benefit to the NRC in its efforts to conduct business in an open and transparent manner, while seeking innovative methods to communicate with external stakeholders.

OIG is reviewing NRC's data center consolidation initiative,⁴ IT acquisition program improvements, and IT asset review process⁵ per Office of Management and Budget guidance and policy. OIG is also currently reviewing the operational capabilities and performance of an NRC information support system - SLES.⁶

Appendix C provides a list of OIG FY 2012 reports relevant to this challenge and examples of agency actions addressing the challenge.

⁴ NRC is pursuing consolidation of data center assets in response to the Federal Data Center Consolidation Initiative (FDCCI) guidance published by the Office of Management and Budget (OMB). The FDCCI aims to promote the use of Green IT, reduce costs of data center hardware, increase overall IT security posture, and shift IT investments to more efficient computing platforms and technologies.

⁵ NRC is in the process of reengineering its IT governance process and IT asset review process in response to OMB guidance. The 25-Point Implementation Plan to Reform Federal Information Technology Management requires agencies to reform and strengthen IT investment review boards and to implement an IT review process called TechStat. TechStat sessions are face-to-face evidence-based reviews of IT programs. The goal of these sessions is to determine whether to turn around, halt, or terminate investments that do not provide value to U.S. citizens.

⁶ SLES - the Safeguards Information Local Area Network and Electronic Safe – is NRC's secure content management system for safeguards information. Safeguards information is defined as information the disclosure of which could reasonably be expected to have a significant adverse effect on the health and safety of the public and/or common defense and security by significantly increasing the likelihood of theft, diversion, or sabotage of materials or facilities subject to NRC jurisdiction.

CHALLENGE 6

Administration of all aspects of financial management and procurement.

NRC management is responsible for meeting the objectives of several statutes, including the Federal Managers' Financial Integrity Act. This act mandates that NRC establish controls that reasonably ensure that (1) obligations and costs comply with applicable law; (2) assets are safeguarded against waste, loss, unauthorized use, or misappropriation; and (3) revenues and expenditures are properly recorded and accounted for. This act encompasses program operational and administrative areas, as well as accounting and financial management.

NRC's procurement of goods and services must be made with an aim to achieve the best value for the agency's dollars in a timely manner. Agency policy provides that NRC's procurement of goods and services should support the agency's mission; be planned, awarded, and administered efficiently and effectively; and be consistent with sound business practices and contracting principles. Agency efforts are currently focused on the goals of achieving (1) a 21st century acquisition program that uses state-of-the-art acquisition methodologies for acquisition planning, execution, management, and closeout, and (2) an acquisition program that fully integrates with agencywide program and financial planning and execution.

Issues

Financial Management

- Respond to the flat budget environment.
- Improve the performance and functionality of the agency's core financial system.
- Implement a new travel management system.

Procurement

- Respond to Commission direction to implement a 21st century acquisition program that will consider broader agency programmatic requirements.
- Implement an acquisition system that is integrated with the agency's core financial system.

Assessment:

Financial Management

During FY 2012, OIG audits relevant to this challenge identified that NRC continues to have sound financial management practices. For example, the *Audit of the NRC's Financial Statements for Fiscal Year 2011* resulted in an unqualified audit opinion. Moreover, other OIG audits with financial aspects demonstrated that NRC is in compliance with Federal laws and standards related to financial management.

OIG continues to monitor the agency's new core financial system, the Financial Accounting and Integrated Management Information System (FAIMIS). OIG periodically meets with the Office of the Chief Financial Officer to discuss ongoing issues with FAIMIS. Current audits demonstrate that OIG is committed to identifying areas needing improvement. OIG is currently conducting audits of NRC's budget execution process and travel charge card program, which require OIG auditors to review information generated from FAIMIS.

Procurement

OIG continues to monitor the agency's procurement activities through quarterly meetings with the NRC Division of Contracts. During FY 2012, OIG issued a report on an audit of NRC's contract award process. Additionally, OIG conducted an audit of a contract related to an agency system.

Appendix C provides a list of OIG FY 2012 reports relevant to this challenge and examples of agency actions addressing the challenge.

CHALLENGE 7

Management of human capital.

For several years, NRC experienced significant growth resulting from an increased interest in nuclear power. During FY 2012, NRC's workforce was approximately 4,000 staff positions and it is unlikely that NRC will see any growth over the next several years. Going forward, NRC will need to support increasing mandates within a zero-growth or declining budget environment. NRC must institutionalize an approach that focuses on its mission of protecting the public health and safety while remaining mindful of staff needs. To manage human capital effectively, while continuing to accomplish the agency's mission, NRC must continue to implement initiatives in the following areas:

- Reducing inefficiencies and overhead by centralizing and streamlining processes while maintaining or improving the level of customer service.
- Space planning.

Issues

- Respond to the flat budget environment.
- Adapt training and development programs to the changing needs of agency staff.
- Address knowledge management in light of the high number of senior experts and managers who are or will be eligible to retire.
- Facilitate continuation of its space planning efforts, including completion of the Three White Flint North building at NRC headquarters.

Assessment

OIG continues to monitor the agency's budget and hiring practices through quarterly meetings with offices in the corporate management area.

Additionally, during our audits and evaluations, OIG considers both budgeting information for NRC programs and training needs for staff and

makes recommendations, as appropriate, for improvements in these areas. For example, OIG discussed improvements needed in the training offered by the agency in reports concerning NRC's (1) contract award process; (2) management of import/export authorizations; (3) Inspections, Tests, Analyses, and Acceptance Criteria process; and (4) protection of Safeguards Information.

With regard to the construction efforts of Three White Flint North, OIG continues to meet on a quarterly basis with the Directorate for Space Planning and Consolidation, Office of Administration. Updates on construction and any scheduling changes for the transition of staff to the new building are communicated during these meetings.

OIG investigations completed during FY 2012 pertained to various human capital issues. For example, several investigations addressed misuse of the Government travel card by charging non-travel related expenses, and one identified a contractor's misuse of Government resources by viewing inappropriate material. While some of the individuals who misused these resources had received counseling that such activities were prohibited, continued misuse in these areas suggests a need for broader and clearer messaging in these areas. Another investigation identified that NRC managers and staff can do a better job of ensuring that employee official travel destinations are necessary to execute NRC's mission and to ensure that traveler-claimed expenses are authorized, necessary, and related to the official travel purpose. In a separate matter, OIG investigations identified an employee who provided fraudulent material to support a permanent change of station move.

Appendix C provides a list of OIG FY 2012 reports relevant to this challenge and examples of agency actions addressing the challenge.

IV. CONCLUSION

The seven challenges contained in this report are distinct, yet are interdependent to accomplishing NRC's mission. For example, the challenge of managing human capital affects all other management and performance challenges.

The agency's continued progress in taking actions to address the challenges presented should facilitate achieving the agency's mission and goals.

OBJECTIVE, SCOPE, AND METHODOLOGY

OBJECTIVE

The evaluation objective was for the IG, in accordance with the Reports Consolidation Act of 2000, to update what he considers to be the most serious management and performance challenges facing the agency.

SCOPE

This evaluation focused on the IG's annual assessment of the most serious management and performance challenges facing the NRC. The challenges represent critical areas or difficult tasks that warrant high level management attention. To accomplish this work, the OIG focused on determining (1) current challenges, (2) the agency's efforts to address the challenges during FY 2012, and (3) planned agency efforts to address the challenges.

METHODOLOGY

OIG reviewed and analyzed pertinent laws and authoritative guidance, agency documents, and OIG reports, and sought input from NRC officials concerning agency accomplishments relative to the challenge areas and suggestions they had for updating the challenges. Specifically, because challenges affect mission critical areas or programs that have the potential to impact agency operations or strategic goals, NRC Commission members, offices that report to the Commission, the Executive Director for Operations, and the Chief Financial Officer were afforded the opportunity to share any information and insights on this subject.

OIG staff conducted this evaluation from May through August 2012 at NRC headquarters.

CHANGES TO THE MANAGEMENT AND PERFORMANCE CHALLENGES IN 2012

The 2012 list of challenges reflects several changes from the 2011 list (see footnote below⁷ for a listing of the 2011 challenges):

- Challenge 1 was reworded to “Management of regulatory processes to meet a changing environment in the oversight of nuclear materials” to be parallel with Challenge 3’s emphasis on the regulator’s need to stay in step with changing oversight environments.
- Challenge 2, “Management of internal NRC security and oversight of licensee security programs,” now addresses physical security, information security, personnel security, and nuclear security.
- Challenge 4, “Management of issues associated with the safe storage of high-level radioactive waste when there is no long-term disposal solution,” now focuses specifically on the high-level waste (with low-level waste issues now addressed under Challenge 1).
- Challenge 5, “Management of information technology,” was revised to focus on NRC’s use of information technology (with the security aspects of IT management now addressed under challenge 2).

Additionally, minor editorial changes were made to challenges 3 and 7 for parallel grammatical structure. No changes were made to challenge 6.

⁷ The 2011 challenges were: (1) Oversight of nuclear material used for civilian purposes, (2) Managing information to balance security with openness and accountability, (3) Ability to modify regulatory processes to meet a changing environment in the oversight of nuclear facilities, (4) Oversight of radiological waste, (5) Implementation of information technology and information security measures, (6) Administration of all aspects of financial management and procurement, and (7) Managing human capital.

OIG REPORTS⁸ AND AGENCY ACTIONS ADDRESSING THE MANAGEMENT AND PERFORMANCE CHALLENGES

1. Management of regulatory processes to meet a changing environment in the oversight of nuclear materials.

OIG Reports Addressing Challenge 1

- *Audit of NRC's Oversight of Decommissioned Uranium Recovery Sites and Sites Undergoing Decommissioning*, OIG-12-A-06
- *Audit of NRC's Issuance of General Licenses*, OIG-12-A-14
- *Audit of NRC's Oversight of Industrial Radiography*, OIG-12-A-15
- *Audit of NRC's 10 CFR Part 31 General Licensing Program*, OIG-12-A-21

Agency Actions Addressing Challenge 1

NRC continues to work towards integrating the licensing and tracking of source materials under one management mechanism. While NRC has deployed upgrades to the National Source Tracking System, it also continues development of Web-Based Licensing and the License Verification System.

In addition to collecting information in the National Source Tracking System, NRC launched a pilot inspection program to collect information on self-shielded irradiators and other irradiators. The purpose of the pilot is to assess the need to modify the current inspection program to determine if more frequent inspections would result in greater compliance with security requirements.

NRC continues to work on issues regarding the continued disagreement in the medical community about the definition of a medical event.

NRC has been working to resolve issues of material control and accounting in response to a 2003 OIG audit report. NRC has implemented a rule

⁸ The listing of OIG reports addressing each challenge provides some of the audit and investigative reports issued in the challenge area during fiscal 2012, but is not intended to be all-inclusive.

change requiring improved reporting and reconciliation for licensees reporting to the Nuclear Materials Management and

Safeguards System, and continues to verify the adequacy of material control and accounting of special nuclear material at NRC-licensed facilities. Additionally, the Commission has directed NRC staff to revise and consolidate current material control and accounting regulations into Title 10, Code of Federal Regulations, Part 74. The final rule and associated guidance is scheduled to be completed by December 31, 2012.

2. Management of internal NRC security and oversight of licensee security programs.

OIG Reports Addressing Challenge 2

- *Independent Evaluation of NRC's Implementation of the Federal Information Security Management Act (FISMA) for FY 2011, OIG-12-A-04*
- *Audit of NRC's Management of the Baseline Security Inspection Program, OIG-12-A-10*
- *Audit of NRC's Protection of Safeguards Information (SGI), OIG-12-A-12*
- *Mishandling of Personally Identifiable Information by an ILearn Contractor, OIG Case No. 11-26*
- *Evaluation Report- Information Security Risk Evaluation of Region II, Atlanta, GA, OIG-12-A-17*
- *Evaluation Report- Information Security Risk Evaluation of Region III, Lisle, IL, OIG-12-A-22*

Agency Actions Addressing Challenge 2

NRC participated in working groups with the National Archives and Records Administration's Controlled Unclassified Information Office (CUIO) to develop policies for marking, safeguarding, dissemination, decontrol, and destruction of CUI, and submitted NRC's CUI Implementation Plan to the CUIO. The agency also ensured that Privacy Act compliance activities were completed, such as Privacy Impact Assessments, requirements of Office of Management and Budget (OMB) Circular A-130, and OMB requirements for personally identifiable information. The agency updated

online personally identifiable information roles and responsibilities annual training to include role based scenarios.

In FY 2012, the staff initiated plans to reintegrate the Security Cornerstone into the Reactor Oversight Process performance assessment program. The staff exhibited the NRC values of openness and integrity in its efforts to apprise all stakeholders of the details and timeframes associated with the implementation plan. Specifically, the staff issued a Regulatory Issue Summary and presented the implementation plan to internal and external stakeholders in various forums, including the 2012 Regulatory Information Conference and other public meetings. Reintegration of security into the Reactor Oversight Process assessment program also involves changes to the NRC's public Web site; these changes will be made in August 2012 to reflect licensee performance within the Security Cornerstone without disclosing sensitive, security-related information, consistent with current Commission policy.

The Office of Nuclear Security and Incident Response supported multiple industry hosted public workshops on cyber security in order to increase awareness of NRC actions in this area. The office has worked with the university system and specifically the University of Maryland to exchange cyber security information.

3. Management of regulatory processes to meet a changing environment in the oversight of nuclear facilities.

OIG Reports Addressing Challenge 3

- *Audit of NRC's Use of Confirmatory Action Letters*, OIG-12-A-09
- *Audit of NRC's Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Process*, OIG-12-A-16
- *Audit of NRC's Use of Orders*, OIG-12-A-19

Agency Actions Addressing Challenge 3

NRC has embarked on a number of actions in response to the Japan nuclear accident in March 2011. Since then, the agency issued the first regulatory requirements for the Nation's 104 operating reactors based on the lessons-learned at Fukushima Dai-ichi. The NRC continues to evaluate

and act on the lessons learned to ensure that appropriate safety enhancements are implemented at U.S. nuclear power plants. NRC's activities are being led by a steering committee comprised of senior NRC management. Additionally, NRC established the Japan Lessons

Learned Project Directorate, a group of more than 20 full-time employees focused exclusively on implementing the lessons learned.

The staff is currently conducting oversight activities at the new power reactor construction sites at Vogtle and V.C. Summer. NRC's Region II has established a resident inspector's office at each site. Each office now has a construction senior resident inspector and two construction resident inspectors. In addition, Region II sends construction inspectors from the regional office to inspect construction activities at the sites. Furthermore, the agency has undertaken an effort to enhance the assessment of plant performance during construction through the development of a new assessment process. NRC staff began a 12-month pilot of the new program on January 2012 at the Vogtle construction site and on March 2012 at the Summer construction site. The staff plans to provide recommendations to the Commission based on results of the pilot by April 2013.

NRC also undertook an effort to obtain feedback from rulemaking programs across the agency to address cumulative effects of regulation and other aspects of rulemaking.

4. Management of issues associated with the safe storage of high-level waste when there is no long-term disposal solution.

OIG Reports Addressing Challenge 4

No reports were issued in FY 2012; an audit of NRC's oversight of spent fuel pools is planned for FY 2013.

Agency Actions Addressing Challenge 4

Because the U.S. Court of Appeals for the District of Columbia Circuit found that the NRC violated the National Environmental Policy Act in issuing its 2010 update to the Waste Confidence Decision and

accompanying Temporary Storage Rule, the Commission has directed NRC staff not to issue licenses for new reactors or to issue renewed licenses for existing reactors until the court's remand is appropriately addressed.

Currently, NRC does not have active safety oversight responsibilities at the potential Yucca Mountain repository site. When the U.S. Department of Energy, Office of Civilian Radioactive Waste Management, discontinued site activities and closed its Yucca Mountain Project Office, the NRC closed its Las Vegas Onsite Representatives Office.

Challenge 5. Management of information technology.

OIG Reports Addressing Challenge 5

No reports were issued in FY 2012; an audit on the Safeguards Local Area Network and Electronic Safe is underway and FY 2013 audits are planned to address NRC's information technology readiness for Three White Flint North and the Financial Accounting and Integrated Management Information System (FAIMIS).

Agency Actions Addressing Challenge 5

OIS published the NRC Open Government plans for FY 2013 and FY 2014. NRC's Open Government program intersects with OMB's Digital Government Strategy regarding the use of mobile technology to further stakeholder engagement. OMB's strategy provides a framework for moving information safely and securely to internal and external stakeholders and puts additional focus on making high value data more readily usable, irrespective of the technology used to access it.

NRC continued to implement the National Source Tracking System with a focus on ensuring data integrity and increasing online usage of the system. The agency also leveraged information technology, including established listservs, to notify States regarding relevant NRC regulatory actions, and build an infrastructure to support more effective communication and outreach to Tribal governments.

The agency streamlined the NRC IT/Information Management governance process in keeping with current best practices and Office of Management and Budget requirements (e.g., using PortfolioStat and TechStat tools such as a training deck, guidance documents, briefing deck, and other various templates, and process). In addition, improvements were made to the Agencywide Documents Access and Management System to provide new features and capabilities to make the user experience more efficient and effective.

The agency also continued to participate in planning and building the new headquarters building and datacenter to ensure efficient, cost-effective, and future-thinking IT infrastructure requirements are understood and included.

NRC enhanced the base laptop program which provides several enabling technologies for mobile users and supports the capability to 'Work from Anywhere.' Enhancements included the addition of WiFi capability on Mobile Desktops and agency loaner laptops.

An effort is underway to offer the Bring your Own Device service to provide agency staff with secure, remote access to agency e-mail, calendar, and contact data on personally owned mobile devices (e.g., tablets and smartphones).

Challenge 6. Administration of all aspects of financial management and procurement.

OIG Reports Addressing Challenge 6

- *Independent Evaluation of NRC's Contract Award Process*, OIG-12-A-02
- *Results of the Audit of the United States Nuclear Regulatory Commission's Financial Statements for Fiscal Year 2011*, OIG-12-A-03
- *Independent Auditor's Report on the U.S. Nuclear Regulatory Commission's Special-Purpose Financial Statements as of September 30, 2011, and for the Year Then Ended*, OIG-12-A-05

- *Audit of NRC's Implementation of the Federal Managers' Financial Integrity Act for Fiscal Year 2011, OIG-12-A-07*
- *Independent Auditor's Report on the Condensed Financial Statements, OIG-12-A-08*
- *Audit of NRC's FY 2011 Compliance With the Improper Payment Elimination and Recovery Act of 2010, OIG-12-A-11*
- *Audit of NRC's Management of Import/Export Authorizations, OIG-12-A-13*
- *Audit of NRC's Contract Administration of the EPM contract, OIG-12-A-18*
- *Audit of NRC's Oversight of the Agency's Federally Funded Research and Development Center, OIG-12-A-20*

Agency Actions Addressing Challenge 6

Financial Management

As with many other Federal agencies, NRC has had to meet its mission in the face of budget cuts that have flattened the agency's budget. NRC has worked to reorganize its budget process in an effort to target areas of inefficiencies. NRC also established a Transforming Assets into Business Solutions Task Force to analyze and assess NRC's business practices and develop a plan to reduce the duplication of efforts in corporate and office support areas. The agency is continuing to implement the recommendations of the task force.

At the beginning of FY 2011, NRC deployed its new core financial management system, FAIMIS. During FY 2012, the agency transferred the hosting responsibilities for FAIMIS to a new service provider. While FAIMIS has been operational for nearly two fiscal years, there are still a number of functionalities that need improvement including: (1) the reports used by agency staff to reconcile budget and accounting information, and (2) the cost accounting module. To address operational challenges of FAIMIS, the agency has continued to employ several change management and organizational communication strategies.

Regarding NRC's travel management system, the current contract for the governmentwide eTravel system expires at the beginning of FY 2014. The

General Services Administration announced a new vendor in June 2012; however, procurement activities have been suspended pending resolution of a protest from an unsuccessful bidder.

Procurement

NRC executed its first enterprise-wide contract in the area of education and training through its strategic acquisition effort. This resulted in the reduction from 13 vendors to 3 and significant cost savings. Further initiatives are underway in the areas of information technology, meetings and conferences, and technical assistance/research.

Additionally, on May 31, 2012, NRC entered into an interagency agreement with Department of Transportation for the implementation of a new acquisition system. This system will be integrated with FAIMIS. The agency expects the system to be fully implemented by early FY 2014.

Challenge 7. Management of human capital.

OIG Reports Addressing Challenge 7

- *Independent Evaluation of NRC's Contract Award Process*, OIG-12-A-02
- *Audit of NRC's Protection of Safeguards Information*, OIG-12-A-12
Audit of NRC's Management of Import/Export Authorizations, OIG-12-A-13
- *Audit of NRC's Inspections, Tests, Analyses, and Acceptance Criteria*, OIG-12-A-16
- *Questionable Travel Claims by Office of Nuclear Materials Safety and Safeguards Employees*, Case No. 08-51
- *Misuse of Government Travel Card*, Case Nos. 11-34, 11-36, and 11-39
- *Misuse of Government Computer by an Office of Information Services Contractor Employee*, Case No. 11-62
- *Misuse of NRC Citibank Travel Credit Card and Change of Station Fraud by an Office of New Reactors Employee*, Case No. 11-01

Agency Actions Addressing Challenge 7

As NRC continues to transition from a period of aggressive growth to a flat budget, it is critical that the agency has the most effective organizational structure possible. Agency staffing levels have stabilized and it is unlikely that the agency will see any growth over the next several years. As a result, the agency is currently working to institutionalize a workforce planning process that will ensure the agency has the appropriate number of staff with the right skills and experience to ensure successful job performance and realization of organizational objectives.

The agency has also implemented three enterprise wide knowledge management initiatives: (1) identifying high-value/high-risk (of loss) knowledge and skills the Agency currently possesses; (2) capturing and sharing that high-value/high-risk knowledge with other agency staff before it is lost; and (3) identifying high-value opportunities for creation of communities of practice that enable the sharing of knowledge and skills among those employees who perform the same job function.

Additionally, the relocation of headquarters staff to Three White Flint North is scheduled to be completed by March 2013. Currently, to access Three White Flint North, agency employees will have to cross Marinelli Road, a multi-lane road. There is no funding in the budget for either above ground or underground pedestrian access between One White Flint North and Three White Flint North. The Montgomery County Department of Transportation and NRC are continuing to work together to maximize pedestrian safety around the White Flint complex.