

UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

OFFICE OF THE INSPECTOR GENERAL

October 23, 2018

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MEMORANDUM TO:

Chairman Svinicki

FROM:

Hubert T. Bell

Inspector General

SUBJECT:

INSPECTOR GENERAL'S ASSESSMENT OF THE MOST

SERIOUS MANAGEMENT AND PERFORMANCE

CHALLENGES FACING THE NUCLEAR REGULATORY

COMMISSION (NRC) IN FY 2019 (OIG-19-A-01)

In accordance with the *Reports Consolidation Act* of 2000, I am providing what I consider to be the most serious management and performance challenges facing the NRC in FY 2019. Congress left the determination and threshold of what constitutes a most serious management and performance challenge to the discretion of the Inspectors General. I have defined serious management and performance challenges as *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.*

INTRODUCTION

NRC is an independent Federal agency established to license and regulate the Nation's civilian use of radioactive materials to ensure adequate protection of public health and safety, promote the common defense and security, and protect the environment.

NRC performs critical functions to ensure the safe and secure use of radioactive materials in the United States and to protect both the public and radiation workers from radiation hazards that could result from the use of radioactive materials. NRC provides licensing and oversight activities for 98 commercial nuclear power reactors as well as

nuclear fuel cycle facilities, research, test, and training reactors; and radioactive materials used in medicine, academia, and industry.

NRC's principal regulatory functions are to establish regulatory requirements and conduct confirmatory research to support requirements; issue licenses to facility operators and owners, possessors, and users of nuclear materials; oversee these licensees to ensure they are in compliance with NRC requirements and operate safely and securely; and respond to emergencies involving regulated activities.

NRC also participates in international work that is integral to the agency's mandate to protect public health and safety and promote the common defense and security. To carry out its mission, NRC's appropriation for FY 2019 is \$898.35 million.

Based on NRC's mission and objectives, the Office of the Inspector General (OIG) annually identifies what it considers to be the most serious management and performance challenges facing NRC. Our goal is to focus attention on these issues to enhance the effectiveness of NRC programs and operations. Please note, challenges do not necessarily equate to problems; rather, they should be considered areas of continuing important focus for NRC management and staff.

MANAGEMENT CHALLENGES

The FY 2019 management and performance challenges are directly related to NRC's mission areas (commercial nuclear reactors and nuclear materials) and address security, information technology, financial programs, and administrative functions. Our work in these areas indicates that while program improvements are needed, NRC is continually making progress to address OIG recommendations and improve the efficiency and effectiveness of its programs. The FY 2019 management and performance challenges are as follows:

- 1. Regulation of nuclear reactor safety and security programs.
- 2. Regulation of nuclear materials and radioactive waste safety and security programs.
- 3. Management of information and information technology.
- 4. Management of financial programs.
- 5. Management of corporate functions.

During previous management and performance challenges reports, the OIG used six categories to organize the challenge areas for the agency. For the FY 2019 report, we restructured the challenge areas into the five categories shown above to more closely align with the NRC mission areas of external regulatory oversight and internal operations.

From the FY 2018 challenge of management of security over internal infrastructure (personnel, physical, and cyber security) and nuclear security, we moved the internal infrastructure personnel and physical security components under the management of corporate functions challenge. We also moved the internal infrastructure cyber security component under the management of information and information technology challenge. Finally, we moved nuclear security to be shown along with the safety of nuclear plants and materials to form the challenges for nuclear plant safety and security and nuclear materials safety and security.

These challenges represent what OIG considers to be inherent and continuing program challenges relative to maintaining effective and efficient oversight and internal management controls. As a result, some are likely to remain challenges from year to year, while others may be removed from the list as progress is made toward resolution.

Attached is a brief synopsis of each management and performance challenge along with summaries of OIG audits and planned work that has informed the decision-making process. A complete list of reports can be found at: https://www.nrc.gov/reading-rm/doc-collections/insp-gen/

1. Regulation of nuclear reactor safety and security programs.

NRC is responsible for maintaining an established regulatory framework for the safe and secure use of civilian nuclear reactors, including commercial nuclear power plants as well as research, test, and training reactors. There are currently 98 civilian nuclear power reactors licensed to operate in the United States, which generate about 20 percent of the Nation's electricity, as well as two plants under construction (Vogtle 3 and 4). There are also 31 licensed research and test reactors.

NRC's regulatory oversight responsibilities in the reactor arena include developing policy and rulemaking, licensing and inspecting reactors, licensing reactor operators, and enforcing regulations.

In FY 2018, the agency implemented its nuclear reactor safety program with \$449 million and 2,048 full-time equivalent employees. However, in its FY 2019 congressional budget justification, NRC requested approximately \$475 million to support 1,925 full-time equivalent employees. This anticipated reduction of 123 personnel underscores the importance of implementing nuclear reactor safety oversight activities as effectively and efficiently as possible.

Key reactor safety and security oversight challenges for NRC include the following:

- Ensuring an adequate and efficient reactor and operator licensing process, accounting for safety impacts of major changes to plant configuration, and sufficiently evaluating older plants for license extensions.
- Providing an adequate number of trained inspectors for sufficient oversight, and ensuring inspection procedures are adequate and are being followed.
- Ensuring adequate construction oversight of new power reactors, adequately
 reviewing and approving design changes that are occurring concurrent with the
 construction, and verifying whether plants are built in accordance with the intended
 design.
- Ensuring appropriate and reasonable application of the agency's Reactor Oversight Process, Construction Reactor Oversight Process, Enforcement Policy, generic

requirements and backfit process, safety culture policy, and Alternative Dispute Resolution.

- Incorporating operating experience from the domestic and international nuclear industries into NRC's regulatory program, and identifying generic requirements.
- Ensuring effective oversight of physical and personnel security at nuclear power plants.

The following synopses are examples of work that OIG has completed or is ongoing pertaining to nuclear reactor safety and security programs.

Audit of NRC's Special and Infrequently Performed Inspections OIG-18-A-13, May 16, 2018

The NRC may conduct special and infrequent inspections using criteria in Inspection Manual Chapter (IMC) 2515 Appendix C. These inspections are in addition to baseline inspections conducted at commercial nuclear power plants in support of the Reactor Oversight Process. NRC conducts these special and infrequent inspections in response to safety and security events at nuclear power plants, and to ensure the safety of infrequent, but major, plant licensing and maintenance activities.

The audit objectives were to assess NRC's processes for (1) identifying conditions that warrant special and infrequently performed inspections at commercial power reactors under IMC 2515 Appendix C, and (2) conducting these inspections in accordance with agency guidance.

NRC staff are required to review IMC 2515 Appendix C inspection procedures on a 4-year periodic basis. However, NRC staff do not consistently review all IMC 2515 Appendix C inspection procedures on a periodic basis as required because there is conflicting guidance and low staff awareness of procedural requirements for conducting these reviews. As a result, outdated IMC 2515 Appendix C inspection procedures could reduce the efficiency and effectiveness in the planning and performance of these inspections.

Additionally, NRC management is responsible for developing application controls to achieve validity, completeness, and accuracy of data processed in an information system. However, NRC staff incorrectly coded inspections under IMC 2515 Appendix C in the agency's legacy Reactor Program System. This occurred because application controls in the Reactor Program System, operational before October 2017, were not sufficient to ensure proper coding of inspections to IMC 2515 Appendix C. Reliable data is important for effective management and oversight of NRC's inspection activities.

This report made six recommendations regarding periodic assessments of IMC 2515 Appendix C inspection procedures and application controls in the Replacement Reactor Program System – Inspections Module.

The full report is available at: https://www.nrc.gov/docs/ML1813/ML18136A734.pdf

Audit of NRC's Process for Modifying and Communicating Standard Technical Specifications, OIG-18-A-15, June 18, 2018

Technical specifications are part of an NRC license authorizing the operation of a nuclear production or utilization facility. The Standard Technical Specifications are guidance for modifying the approved nuclear power plant's operating license in accordance with Section 36 of Part 50 of Title 10 of the Code of Federal Regulations, "Technical specifications" (10 CFR 50.36).

The Standard Technical Specifications are published for each of the reactor types in a set of NUREG-series publications. NRC modifies the Standard Technical Specifications through a process initiated by the industry-sponsored Technical Specifications Task Force, which submits proposed changes to NRC. The submissions are referred to as Travelers.

The audit objective was to assess the effectiveness and efficiency of NRC's process for modifying Standard Technical Specifications and communicating these modifications to staff and licensees. NRC generally modifies Standard Technical Specifications in an efficient and effective manner. However, NRC's Standard Technical Specification modification process could be strengthened in the following areas:

- Implementation of structured knowledge management practices to fully implement knowledge sharing practices directed at succession planning, training, and guidance for the Traveler modification process. Establishing a more structured approach to knowledge management would reduce the risk of regulatory inconsistency and inefficiency.
- Implementation of quality assurance measures for Traveler data in the Replacement Reactor Program System—Licensing Module to prevent staff hour discrepancies and billing misallocations. NRC is taking corrective action to address the staff hour discrepancies and billing misallocations, however, these actions are not yet complete.

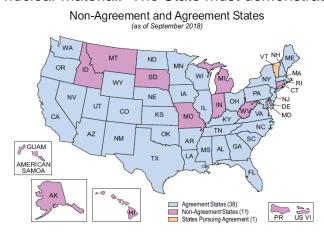
This report made eight recommendations to strengthen Technical Specifications Branch knowledge management practices and enhance quality assurance measures for program data.

The full report is available at: https://www.nrc.gov/docs/ML1816/ML18169A142.pdf

2. Regulation of nuclear materials and radioactive waste safety and security programs.

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 high-level and low-level radioactive waste. 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. NRC's oversight of material licensees is done through its regional offices, Region I, Region III, and Region IV. Region I handles the oversight for licensees in the Region II area. Region II handles oversight for all of NRC's fuel cycle licensees.

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



Source: e-mail from Chief, NMSS/MSTR/ASPB, SEP 26

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. On September 25, 2018, the NRC entered into an agreement with the state of Wyoming, transferring regulatory authority to the state over certain radioactive materials. Effective September 30, 2018, Wyoming became the 38th Agreement State. With the agreement, the NRC is transferring to

Wyoming the responsibility for licensing, rulemaking, inspection and enforcement activities necessary to regulate source material involved in uranium or thorium milling and the management and disposal of milling waste, or mill tailings. Fourteen uranium recovery licenses will be transferred to Wyoming's jurisdiction.

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 material 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 radioactive waste becomes harmless only

through decay (which can take hundreds of thousands of years for high-level waste), the material must be stored and ultimately disposed of in a way that provides adequate protection of the public for a very long time. Due to the lack of a permanent repository for high-level radioactive waste in the United States, NRC continues to license and regulate the storage of high-level radioactive waste at Independent Spent Fuel Storage Installations across the country.

Low-level radioactive waste is typically produced at nuclear power reactors, hospitals, research facilities, and clinics from the use of nuclear materials for industrial and medical purposes. NRC regulates the management, storage, and disposal of radioactive waste produced as a result of NRC-licensed activities. Low-level radioactive waste includes contaminated protective clothing, equipment and tools, medical supplies, and laboratory animal tissues. Currently, all of the country's disposal facilities are located in Agreement States.

In addition, the number of nuclear power reactors being decommissioned continues to increase as more reactors reach the end of their licensed life or face challenging financial conditions. The decommissioning of nuclear power reactors continues to be a challenge for NRC and many licensees.

A large number of materials licenses are also terminated each year. Most of these license terminations are routine, and the sites require little remediation to meet NRC's criteria for unrestricted release. However, some of these decommissioning facilities present technical and policy challenges that could require large expenditures of NRC staff resources.

Key nuclear materials and radioactive waste safety and security oversight challenges for NRC include the following:

- Ensuring that licensing activities are conducted consistent with NRC requirements.
- Providing effective oversight of licensees' radioactive materials programs to preclude loss or theft.
- Staying current with emerging technologies, particularly with medical uses of radioactive materials.
- Tracking radioactive materials.

- Ensuring that nuclear materials are safe and accounted for during exporting and importing activities.
- Ensuring that Agreement State programs are adequate to protect public health and safety and the environment, and are compatible with NRC's program.
- Providing effective oversight for the safe and secure interim storage of increasing quantities of high-level radioactive waste until a permanent repository for high-level radioactive waste is operational.
- Ensuring the management of licensee programs for the safe storage and disposal of low-level radioactive waste produced as a result of NRC-licensed activities.
- Managing complex decommissioning activities.
- Continuing to pursue the need for new regulations focused on unique requirements of nuclear power plants undergoing decommissioning, in order to align the requirements with the reduction in risk that occurs over time, while maintaining safety and security.

The following synopses are examples of work that OIG has completed or has underway in the nuclear materials and radioactive waste safety and security programs.

Audit of NRC's Oversight of the National Materials Program OIG-18-A-11, April 4, 2018

OIG found that the National Materials Program provides a framework for carrying out NRC and Agreement State radiation safety regulatory programs; however, opportunities for improvement exist with regard to effectiveness. Specifically, NRC should improve its documentation and communication of the program framework.

The National Materials Program framework is not well understood by stakeholders. In order for a program to be effective at accomplishing its mission, stakeholders should share a common understanding of a program. However, the National Materials Program framework is not well documented or communicated and lacks a champion. As a result, Agreement States are not satisfied with the level of influence they have on the Program.

This report included two recommendations to improve the effectiveness of NRC's oversight of the National Materials Program through improving documentation and communication of the Program framework.

The full report is available at: https://www.nrc.gov/docs/ML1809/ML18094A280.pdf

Audit of NRC's Transition Process for Decommissioning Power Reactors (To be initiated in FY 2019)

When a power company decides to close a nuclear power plant permanently, the facility must be decommissioned by safely removing it from service and reducing residual radioactivity to a level that permits release of the property and termination of the operating license. The NRC's regulatory process for transitioning power reactors from operation to decommissioning has been a challenge for many licensees.

The largest amount of licensing activity is expected to occur during the transition from operation to decommissioning. During this period a number of modifications — both technical and organizational — are needed to adapt the plant to meet new objectives and requirements as stated in several NRC regulations.

The NRC's transition period typically concludes with the transfer of regulatory responsibility from the operating reactor organization, NRR, to the nuclear materials program organization, the Office of Nuclear Material Safety and Safeguards (NMSS).

The number of nuclear power reactors being decommissioned may increase in the coming years as more reactors reach the end of their original or extended licensed life, and as some plants face challenging financial conditions.

This audit objective is to determine whether the process NRC uses to transfer responsibility for oversight of commercial reactors transitioning from operating to decommissioning status ensures licensees meet applicable requirements and protects public health and safety.

3. Management of information and information technology.

Technology advances rapidly. The challenge is supporting a future-ready workforce equipped with modern tools, technologies, skills, and knowledge necessary to meet both current and future mission needs. NRC must also meet the regulatory and statutory Federal mandates for Information Technology/Information Management (IT/IM). The responsibility of the NRC's IT/IM program is to maintain and enhance services and infrastructure to enable the mission. This goal reflects the NRC's commitment to openness and is essential for effective agency operations.

Key information technology and information management challenges for NRC include the following:

- Ensuring that data is securely accessible from anywhere, at any time, on any device to support the agency's workforce.
- Leveraging innovative technologies to coordinate, securely share, and collaborate on information with both domestic and international partners.

NRC manages information and employs information technology (IT) to enhance information access and strengthen physical security and agency performance in carrying out its mission. 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 oversight of the protection of operating facilities and facilities undergoing decommissioning, the use of nuclear materials, sharing of sensitive information, emergency preparedness and incident response.

Key internal security oversight challenges for NRC include the following:

Increasing numbers, types, and sophistication of cyber threats highlight the
need to reinforce the security over NRC's information systems. For example,
advanced persistent threats where an adversary that possesses sophisticated
levels of expertise and significant resources can attack using multiple means
such as cyber, physical, or deception to achieve its objectives, pose increasing
risks.

- Directing agency-wide information resource planning to ensure that agency information technology, information management, and information technology security resources are selected and managed to provide maximum value to the agency.
- Executing the insider threat prevention and detection program for detecting, deterring, and mitigating insider threats to address protection of classified and safeguards information from exploitation, compromise, or unauthorized disclosure.
- Managing risk-based information security strategies to protect against sophisticated cyber-attacks.
- Executing the Federal Information Security Modernization Act of 2014, to strengthen the security of computer networks.
- The biggest challenge to IT in the future is security. Security could negatively impact connectivity to public networks.

The following audit report synopses are examples of work that OIG has completed in the IT/IM and information security programs.

Evaluation of NRC's Shared "S" Drive OIG-18-A-06, December 21, 2017

On July 6, 2017, OIG identified and accessed an employee's bank account information on a personal check that was scanned and saved to the agency's shared "S" drive.

After finding that the sensitive information was not protected by access controls, OIG reviewed the shared "S" drive for Personally Identifiable Information (PII) and identified a folder dated 2011, which had 35 subfolders for several offices in the agency. Of the 35 subfolders, 17 contained PII without appropriate access controls.

The objective was to assess how NRC effectively manages and protects PII stored on the shared "S" drive in accordance with Federal regulations.

OIG evaluated NRC's shared drives to assess how the agency effectively manages and protects PII stored on the shared "S" drive in accordance with Federal regulations. OIG found weaknesses in the following areas:

- -NRC staff store PII on the shared "S" drive without appropriate safeguards.
- -NRC does not manage PII stored on the shared "S" drive.

This report made four recommendations to improve NRC's procedures and process for managing and protecting PII stored on the shared "S" drive.

The full report is available at: https://www.nrc.gov/docs/ML1735/ML17355A433.pdf

U.S. Nuclear Regulatory Commission Office of the Inspector General External Vulnerability Assessment and Penetration Test OIG-18-A-14, June 6, 2018

The Federal Information Security Modernization Act of 2014 (FISMA) outlines the information security management requirements for Federal agencies, which includes an annual independent evaluation of the agency's information security program and practices to determine their effectiveness.

FISMA requires the annual evaluation to be performed by the agency's OIG or by an independent auditor. The NRC OIG retained Richard S. Carson & Associates, Inc., to perform the fiscal year 2017 FISMA evaluation, including conducting an external vulnerability assessment and penetration test.

The objective of the testing was to verify the presence of network devices, identify vulnerabilities in external systems that could be exploited by external threats through the Internet, determine risk, and aid management in countering or mitigating associated risks.

OIG conducted a vulnerability assessment and penetration testing of external Internet systems on the NRC computer network. The testing was conducted from Carson, Inc. Penetration Testing Lab in Bethesda, Maryland and the Washington, DC, metro area.

As a result of the assessment and testing, OIG made one recommendation to the Executive Director for Operations that will improve NRC's information security program.

The full report is Official Use Only and not publically available.

Summary Report of FISMA Evaluations Conducted in Fiscal Year 2017 OIG-18-A-08, December 21, 2017

The OIG issued this memorandum report to summarize the findings and recommendations of the six Federal Information Security Modernization Act of 2014 (FISMA) evaluations conducted in Fiscal Year (FY) 2017. FISMA outlines the information security management requirements for Federal agencies, which includes an independent evaluation of the agency's information security program and practices to determine their effectiveness.

Each regional office and the Technical Training Center (TTC) is responsible for implementing the NRC information security program at their location. In order to evaluate the effectiveness of NRC's information security program and practices across the entire agency, NRC OIG conducts periodic independent evaluations at the regional offices and TTC.

Overall, the six FY 2017 FISMA evaluations at Headquarters (HQ), the Regions, and TTC resulted in nine findings and 14 recommendations to address those findings.

There was one management issue identified, but there were no recommendations made. As such, there are no new recommendations in this summary report.

The full report is available at: https://www.nrc.gov/docs/ML1735/ML17355A502.pdf

4. Management of financial programs.

NRC is required by the *Omnibus Budget Reconciliation Act of 1990* to collect fees totaling approximately 90 percent of its annual budget authority. The agency's budget authority for FYs 2017 and 2018, including carryover, was approximately \$935 million and \$911 million, respectively. The NRC estimated that \$881 million for FY 2017 and \$800 million for FY 2018 should be recovered from invoiced fees. NRC is required to establish a schedule of charges that fairly and equitably assesses the fees to license holders and license applicants. In recent years, multiple external stakeholders have questioned NRC's budget and fee structure. Moreover, NRC has been reducing its budget and full-time equivalents, with the exception of a FY 2019 request to increase funding for resources for the High-Level Waste program and activities related to preparing to review advanced nuclear reactor technologies. In recent years, NRC has initiated projects to improve its fee calculation process and fee billing structure. To maintain transparency, NRC must continue to implement solid internal controls over financial management and reporting.

Key financial management and reporting challenges include the following:

- Developing and implementing the agency's budget in accordance with Federal laws, regulations, and guidelines.
- Maintaining a fee structure in accordance with laws and regulations and that is fair to agency licensees.
- Improving controls over license fee billing.
- Maintaining effective controls over financial reporting, contracts, and grants.
- Improving agency guidance for decommissioning programs.

The following audit report synopses are examples of completed, initiated or planned OIG work pertaining to financial programs.

Audit of NRC's Grants Awards Process (Initiated in 2018, and will continue in 2019.)

In FY 2018, NRC awarded 51 individual grants totaling \$15 million to universities for scholarships, fellowships, and faculty development grants. In addition, the Agency made grants to trade schools and community colleges. NRC's intends grant funding to help support education in nuclear science, engineering, and related trades to develop a workforce capable of the design, construction, operation, and regulation of nuclear facilities and the safe handling of nuclear materials.

The Office of Management and Budget requested NRC develop performance metrics for the grants program and require grantees to address those metrics in 6-month performance progress reports. While NRC's grant program supports over 500 students annually, it directs most grant money to university faculty and curriculum development. NRC also notes a critical workforce need in the trade and craft areas of nuclear education and observes that outreach to pre-college students is essential to enable students to make informed decisions about pursuing the study of nuclear technology.

The audit objectives are to determine if (1) NRC's policies and procedures for reviewing grant proposals and making awards comply with applicable federal regulations, and (2) internal controls over the pre-award and award process are adequate.

Audit of NRC's Process for Managing Intra-Government Payment and Collection System Payments (To be initiated in FY 2019)

Federal agencies frequently provide services to other agencies. These services require an exchange of money when the agencies enter into an agreement and services are performed. Federal agencies use the Department of Treasury's Intra-Government Payment and Collection (IPAC) system to transfer funds from one agency to another with standardized descriptive data. While the Department of Treasury administers the IPAC system, NRC has to ensure that transactions in the system are accurate and paid in a timely manner.

NRC processes approximately \$80 million a year through the IPAC system. The agency's Office of the Chief Financial Officer receives the IPAC payment or reimbursement request and then forwards the IPAC action to the corresponding NRC Contracting Officer's Representative (COR) for review and approval.

In recent years, there have been concerns about IPAC payment requests being sent to incorrect NRC CORs, payments not being submitted in a timely manner, and insufficient data being provided to review IPAC transactions.

The audit objective is to assess whether NRC has established and implemented an effective process to ensure that IPAC payments are processed in a timely and accurate manner.

5. Management of corporate functions.

NRC should continue exploring ways to gain administrative efficiencies while maintaining the appropriate corporate support to carry out agency operations. During FY 2018, the NRC workforce totaled approximately 3,133 available staff positions. To support the agency's technical staff, NRC provides corporate support services such as contract support and multiple human resource programs. While NRC has implemented multiple programs to support agency staff, NRC continues to operate in a Federal Government environment of reduced full time equivalents (FTE) with only a recent small increase in the budget request for FY 2019. Because of this, the agency needs to have an appropriate balance between administrative functions and technical needs. In addition, NRC must be able to effectively recruit, train, and transfer knowledge to new hires, if applicable. This includes maintaining up-to-date guidance to effectively transfer knowledge and train current staff. NRC initiated Project Aim with the purpose of, among other things, identifying inefficiencies in work processes, and right-sizing the agency to retain skill sets needed to accomplish the agency's mission.

Key NRC corporate support function challenges include the following

- Reducing related costs while continuing to provide essential administrative functions that help the agency carry out its mission.
- Maintaining agency headquarters operations while complying with Federal space utilization guidelines and carbon footprint reduction targets.
- Recruiting, training, and effectively transferring knowledge to NRC new hires, if applicable.
- Providing current staff with the training and tools to maintain and/or improve the skills needed to effectively perform their jobs.
- Keeping NRC policies and procedures current.

The following audit report synopses are examples of work that OIG has conducted or is planning to conduct pertaining to NRC's administrative functions.

Audit of NRC's Knowledge Management Program (To be initiated in FY 2019)

Knowledge management is a discipline that promotes an integrated approach to identifying, capturing, evaluating, retrieving, and sharing an enterprise's information assets. These assets may include databases, documents, policies, procedures, and previously un-captured expertise and experience in individual workers.

However, efforts to reduce NRC's staffing and budget have raised knowledge management concerns affecting the performance of the agency. Additionally, OIG's FY 2018 management challenges report noted a key NRC corporate support function challenge includes "recruiting, training, and effectively transferring knowledge to NRC new hires."

The audit objective is to assess the effectiveness of NRC's knowledge management program in helping the agency capture and transfer knowledge for the purposes of meeting its mission.

Audit of NRC's Contract Administration Process (To be initiated in FY 2019)

NRC obligated over \$402 million through contracts for products and services as of December 31, 2016. This spending accounted for almost 40 percent of the agency's discretionary spending, indicating that NRC is greatly reliant on contractors to execute its mission.

Because contract spending consumes a large portion of the agency's discretionary budget, contract obligations pose significant risks if effective contract oversight is not in place. As a result, OIG has taken steps to strengthen and enhance oversight of contracting practices. During FY 2017, OIG completed the *Audit of NRC's Contract Administration Process* and found that, while internal controls governing NRC's contract administration practices are adequate, opportunities exist to improve the effectiveness of internal controls for management of contractor invoices and supporting documentation, and contract closeout procedures followed by agency CORs.

Based on the results of work for the FY 2017 contract administration audit, OIG plans to perform follow-up audits or evaluations of NRC's contract administration functions, processes, and procedures.

The audit objective is to identify additional areas for improvement of NRC's contract administration processes and assess whether CORs are carefully monitoring the work of contractors, reviewing invoices for accuracy and adhering to contract terms and regulations.

Evaluation of NRC's Headquarters Operations Center Staffing OIG-18-A-16, June 21, 2018

The NRC Headquarters Operations Center (HOC) maintains direct contact with nuclear power plants and receives reports from reactor, fuel cycle, and nuclear materials licensees as required by regulations.

The HOC is staffed 24 hours a day, 365 days a year with qualified watch standers. In serving as NRC's initial contact for all incident reports, HOC staff are responsible for maintaining awareness of NRC-licensed facilities and materials, and for performing independent situational analysis of incidents in order to ensure that licensees are implementing appropriate protective measures and to notify appropriate NRC staff.

The OIG found that response and coordination activities were able to be supported by the HOC during calendar year 2017, but under sub-optimal conditions that strained available staff resources.

Resource reduction, HOC staff departures, and hiring delays combined to produce a staffing shortage throughout calendar year 2017. Management underestimated the magnitude of programmatic impacts from the staff resource reduction and had not adequately planned how to maintain staffing levels. The number of available HOC staff dropped to the point of requiring that a non-qualified second person fill shifts.

Staffing conditions resulted in reducing the HOC's available capacity to support the agency's response and coordination role. Current staffing has improved through ongoing management efforts, and can be further strengthened.

This report included three recommendations to improve the management of HOC staffing.

The full report is available at: https://www.nrc.gov/docs/ML1817/ML18172A159.pdf

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COMMENTS AND SUGGESTIONS

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