

# EVALUATION REPORT

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

OIG-08-A-20 September 30, 2008



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

OFFICE OF THE  
INSPECTOR GENERAL

September 30, 2008

MEMORANDUM TO: Chairman Klein

FROM:

  
Hubert T. Bell  
Inspector General

SUBJECT: INSPECTOR GENERAL'S ASSESSMENT OF THE MOST  
SERIOUS MANAGEMENT AND PERFORMANCE  
CHALLENGES FACING THE NUCLEAR REGULATORY  
COMMISSION (OIG-08-A-20)

The *Reports Consolidation Act of 2000* requires the Inspector General of each Federal agency to summarize annually 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 eight management and performance challenges that I consider to be the most serious. The list of eight challenges reflects (1) a new challenge concerning radiological waste; (2) the consolidation of prior challenges 2 and 7, which dealt with information handling and communication, into an overarching challenge about information management; and (3) rewording of three challenges to more precisely articulate the issues NRC is facing in 2008.

We appreciate the cooperation extended to us during this evaluation. The agency provided comments on this report, which have been incorporated as appropriate. If you have any questions or comments about this report, please feel free to contact Stephen D. Dingbaum, Assistant Inspector General for Audits, at 415-5915 or me at 415-5930.

Attachment: As stated

cc: Commissioner Jaczko  
Commissioner Lyons  
Commissioner Svinicki

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## EXECUTIVE SUMMARY

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### BACKGROUND

The *Reports Consolidation Act of 2000* requires the Inspector General (IG) of each Federal agency to summarize annually 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.

### PURPOSE

In accordance with the act, the IG at the Nuclear Regulatory Commission (NRC) updated what he considers to be the most serious management and performance challenges facing NRC. The IG evaluated 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. As part of the evaluation, 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 to address previously identified management and performance challenges.

### RESULTS IN BRIEF

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

This year's list of challenges reflects several changes from last year's list.

- Prior challenge 2, *Appropriate handling of information*, was combined with prior challenge 7, *Communication with external stakeholders throughout NRC regulatory activities*. The consolidation of these challenges resulted in the following description for new challenge 2: *Managing information to balance security with openness and accountability*, which captures the need for both openness and protection of information.
- Prior challenge 3, *Development and implementation of a risk-informed and performance-based regulatory approach*, was revised to the current challenge 3 language: *Implementation of a*

*risk-informed and performance-based regulatory approach.* This change reflects the relative maturity of NRC's risk-informed and performance-based regulatory programs and their advancement beyond developmental efforts to implementation activities.

- Prior challenge 4, *Ability to modify regulatory processes to meet a changing environment, specifically the potential for a nuclear renaissance*, was reworded to more precisely focus on licensing issues. Current challenge 4 now states, *Ability to modify regulatory processes to meet a changing environment, to include the licensing of new nuclear facilities*. Waste issues, formerly covered in challenge 4, are reflected in a new challenge 5, *Oversight of radiological waste*.
- Prior challenge 5, *Implementation of information technology*, was reworded to current challenge 6, *Implementation of information technology and information security measures*, to emphasize the need to ensure that information technology resources use technological solutions for information security when appropriate.

The chart that follows provides an overview of the eight most serious management and performance challenges as of September 30, 2008.

<b>Most Serious Management and Performance Challenges Facing the Nuclear Regulatory Commission*</b> <b>as of September 30, 2008</b> <i>(as identified by the Inspector General)</i>	
<b>Challenge 1</b>	<i>Protection of nuclear material used for civilian purposes.</i>
<b>Challenge 2</b>	<i>Managing information to balance security with openness and accountability.</i>
<b>Challenge 3</b>	<i>Implementation of a risk-informed and performance-based regulatory approach.</i>
<b>Challenge 4</b>	<i>Ability to modify regulatory processes to meet a changing environment, to include the licensing of new nuclear facilities.</i>
<b>Challenge 5</b>	<i>Oversight of radiological waste.</i>
<b>Challenge 6</b>	<i>Implementation of information technology and information security measures.</i>
<b>Challenge 7</b>	<i>Administration of all aspects of financial management.</i>
<b>Challenge 8</b>	<i>Managing human capital.</i>
<b><i>*The most serious management and performance challenges are not ranked in any order of importance.</i></b>	

## CONCLUSION

The eight 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 successfully achieving the agency's mission and goals.

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## **ABBREVIATIONS AND ACRONYMS**

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CFR	Code of Federal Regulations
COL	Combined Operating License
CUI	controlled unclassified information
DOE	Department of Energy
FY	Fiscal Year
IG	Inspector General
IT	information technology
MC&A	material control and accounting
NMSS	Office of Nuclear Material Safety and Safeguards
NMMSS	Nuclear Materials Management and Safeguards System
NRC	U.S. Nuclear Regulatory Commission
NSTS	National Source Tracking System
OIG	Office of the Inspector General
T&L	Time and Labor



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## **I. BACKGROUND**

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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 summarize annually 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. PURPOSE**

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In accordance with the act's provisions, the Nuclear Regulatory Commission (NRC) IG updated what he considers to be the most serious management and performance challenges facing the agency. The IG evaluated 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.

In addition, OIG 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 planned to address previously identified management and performance challenges.

## **III. EVALUATION RESULTS**

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The NRC's mission is to 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 Inspectors General. 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, the IG revised his list of the most serious management and performance challenges facing NRC. The challenges identified represent critical areas or difficult tasks that warrant high-level NRC management attention. The following chart provides an overview of the eight management challenges. The sections that follow provide more detailed descriptions of the challenges, descriptive examples related to the challenges, and examples of efforts that the agency has taken or are underway to address the challenges.

<b>Most Serious Management and Performance Challenges Facing the Nuclear Regulatory Commission*</b> <b>as of September 30, 2008</b> <i>(as identified by the Inspector General)</i>	
<b>Challenge 1</b>	<i>Protection of nuclear material used for civilian purposes.</i>
<b>Challenge 2</b>	<i>Managing information to balance security with openness and accountability.</i>
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<b>Challenge 7</b>	<i>Administration of all aspects of financial management.</i>
<b>Challenge 8</b>	<i>Managing human capital.</i>
<b><i>*The most serious management and performance challenges are not ranked in any order of importance.</i></b>	

## **Changes to Management Challenges**

This year's list of challenges reflects several changes from last year's list.

### **Consolidation of Two Challenges**

Prior challenges 2 and 7 were combined to form challenge 2: *Managing information to balance security with openness and accountability*, which captures the need for both openness and protection of information.<sup>1</sup>

### **New Wording for Three Challenges**

Prior challenge 3 was revised to the current challenge 3 language: *Implementation of a risk-informed and performance-based regulatory approach*.<sup>2</sup> This change reflects the relative maturity of NRC's risk-informed and performance-based regulatory programs and their advancement beyond developmental efforts to implementation activities.

Prior challenge 4 was reworded to more precisely focus on licensing issues.<sup>3</sup> New challenge 4 states, *Ability to modify regulatory processes to meet a changing environment, to include the licensing of new nuclear facilities*.

Prior challenge 5 was reworded to current challenge 6, *Implementation of information technology and information security measures*, to include emphasis on ensuring that information technology (IT) resources use technological solutions for information security when appropriate.<sup>4</sup>

### **New Challenge**

Waste issues, formerly covered in the writeup corresponding to challenge 4, are reflected in a new challenge 5, *Oversight of radiological waste*. Managing current and future waste is a major issue for the nuclear industry and the Nation, and NRC must be prepared to support safe, sound, and long-lasting solutions for high and low level nuclear waste.

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<sup>1</sup> 2007 challenge 2: *Appropriate handling of information*; 2007 challenge 7: *Communication with external stakeholders throughout NRC regulatory activities*.

<sup>2</sup> 2007 challenge 3: *Development and implementation of a risk-informed and performance-based regulatory approach*.

<sup>3</sup> 2007 challenge 4: *Ability to modify regulatory processes to meet a changing environment, specifically the potential for a nuclear renaissance*.

<sup>4</sup> 2007 challenge 5: *Implementation of information technology*.

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## **CHALLENGE 1**

### ***Protection of nuclear material used for civilian purposes.***

NRC is authorized to grant licenses for the possession and use of radioactive materials and establishes regulations to govern the possession and use of those materials. NRC's regulations require that certain material licensees have extensive material control and accounting (MC&A) programs as a condition of their licenses. All other license applications (including those requesting authorization to possess small quantities of special nuclear materials) must develop and implement plans that demonstrate a commitment to accurately control and account for radioactive materials.

The issues facing NRC and the agency's actions to address each issue include the following:

**Issue:** Ensure that radioactive material is adequately protected to preclude its use for malicious purposes.

**Action:** NRC is enhancing its material licensing processes, including a new policy for onsite visits for issuing new material licenses, examinations of existing licenses to determine their legitimacy, and the formation of a working group to update and revise existing material licensing guidance.

**Issue:** Ensure adequate inspections to verify licensees' commitments to their material control and accounting programs.

**Action:** NRC is enhancing its inspection program. Currently, fuel cycle MC&A inspections are a shared responsibility between the Office of Nuclear Material Safety and Safeguards (NMSS) and Region II, with two MC&A inspectors in each location. Additionally, the Commission approved a staff proposed rulemaking effort to include enhancements to MC&A inspection frequency and on April 25, 2008, the staff provided its rulemaking plan to the Commission. The rulemaking is ongoing under the sponsorship of NMSS and the Office of Federal and State Materials and Environmental Management Programs.



**Issue:** Ensure reliable accounting of special nuclear materials in the NRC and Department of Energy's (DOE) jointly managed Nuclear Materials Management and Safeguards System (NMMSS).

**Action:** NRC has been working since 2003 to resolve issues of material control and accounting in response to OIG-03-A-15, *Audit of NRC's Regulatory Oversight of Special Nuclear Materials*. To improve the accuracy of material inventory information maintained in NMMSS, NRC approved the final rule on February 7, 2008, amending the Code of Federal Regulations (CFR) Title 10, Parts 40, 72, 74, and 150. This added requirements to track smaller quantities of special nuclear material. However, the Commission approved a DOE request to delay implementation by 1 year.

**Issue:** Implement the National Source Tracking System (NSTS) to ensure the accurate tracking of byproduct material, especially those materials with the greatest potential to impact public health and safety.

**Action:** NRC expects to have NSTS on line by December 31, 2008, initially populating the system with data submitted into an interim database by licensees during 2008. In addition, NRC has initiated several rulemakings to expand the materials tracked in NSTS.

**Issue:** Ensure that Agreement State programs are adequate to protect public health and safety and the environment, and are compatible with NRC's program.

**Action:** NRC continues to conduct about 10 to 12 reviews per year of Agreement State radioactive materials programs under NRC's Integrated Materials Performance Evaluation Program.

## **CHALLENGE 2**

### ***Managing information to balance security with openness and accountability.***

NRC employees create and work with a significant amount of sensitive information that needs to be protected. Such information includes sensitive unclassified information and classified national security information contained in written documents and various electronic databases.

In addressing continuing terrorist activity worldwide, NRC continually reexamines its information management policies and procedures. NRC faces the challenge of attempting to balance the need to protect sensitive information from inappropriate disclosure with the agency's goal of openness in its regulatory processes. Over the past year, NRC has made various efforts to improve public access to information while protecting sensitive information, including security-related information, from inappropriate disclosure.

The issues facing NRC and the agency's actions to address each issue include the following:

**Issue:** Manage information in accordance with new Federal Government policies for designating, marking, safeguarding, and disseminating controlled unclassified information (CUI).

**Action:** NRC will implement new CUI policies and procedures over a 5-year period once guidance has been issued by the National Archives and Records Administration. Safeguards Information is exempt from the new regulations; therefore, NRC will continue to manage Safeguards Information according to current policies.

**Issue:** Ensure that sensitive information is handled in accordance with agency policies and procedures for public disclosure.

**Action:** NRC responded to congressional and public concern regarding an incident at a Nuclear Fuel Services, Inc., facility by reviewing and releasing a number of pertinent agency documents that had not been made publicly available. In addition, the NRC resumed public meetings on the facility's performance during the fall of 2007.

**Action:** NRC issued multiple announcements related to the appropriate handling of information. It also completed reviews of shared network drives and office files to ensure

that personally identifiable information and Privacy Act information was adequately protected or removed if unnecessary.

**Issue:** Provide external stakeholders with clear and accurate information about regulatory programs, and facilitate public participation in the regulatory process.

**Action:** The staff conducted monthly public working-level meetings with industry and public stakeholders to discuss ongoing changes to the Reactor Oversight Process. The staff also conducted public meetings near each operating reactor to discuss results of the NRC's annual assessment of the licensee's performance. Further, staff held an annual public meeting in November 2007 to present information on the overall security performance of the commercial reactor industry, and to respond to questions and solicit comments on nuclear security issues. Lastly, in November 2007, staff issued a revised communications plan for engaging Federal, Tribal, State, and local government stakeholders.

### **CHALLENGE 3**

#### ***Implementation of a risk-informed and performance-based regulatory approach.***

NRC's intent is to increase its safety focus on licensing and oversight activities through the application of a balanced combination of experience, deterministic models, and probabilistic analysis. This approach is known as risk-informed and performance-based regulation. Incorporating risk analysis into regulatory decisions is intended to improve the regulatory process by focusing both NRC and licensee attention and activities on the areas of highest risk.

The issues facing NRC and the agency's actions to address each issue include the following:

**Issue:** Ensure that the appropriate level of focus on risk-informed and performance-based regulation is maintained.

**Action:** NRC continues its work to improve the agency's Risk-Informed Performance-Based Plan, including a recent expansion of the plan's objectives to more fully achieve a holistic, risk-informed, and performance-based regulatory structure.

**Issue:** Develop and implement risk-informed and performance-based regulation for fuel cycle facilities.

**Action:** The agency conducted risk analyses during an application review for a proposed gas centrifuge facility and continued implementation of an enhanced fuel cycle facility oversight process.

**Issue:** Ensure that the Reactor Oversight Process meets the agency's regulatory needs.

**Action:** NRC uses results of an annual self-assessment of the Reactor Oversight Process to better identify significant performance issues and to ensure that licensees take appropriate actions to maintain acceptable safety performance.

**Issue:** Ensure that research programs enhance the validity of current risk models, and also develop risk insights for new technologies, including program areas transitioning to risk-informed regulation.

**Action:** NRC continues to make progress in developing risk assessments. For example, NRC completed a review of the fire probabilistic risk assessment for two nuclear power plants. The agency also continues to develop tools that allow staff to make complex and probabilistic risk-assessment calculations on their desktop computers.

#### **CHALLENGE 4**

***Ability to modify regulatory processes to meet a changing environment, to include the licensing of new nuclear facilities.***

NRC faces the challenge of maintaining its core regulatory programs while adapting to changes in its regulatory environment. NRC must address a growing interest in licensing and constructing new nuclear power plants to meet the Nation's demand for energy production. By August 2008, NRC had received 12 Combined Operating License (COL) applications (Calvert Cliffs, South Texas Project, Bellefonte, North Anna, Lee, Shearon Harris, Grand Gulf, Vogtle, V.C. Summer, Comanche Peak, Levy County, and Victoria County). NRC expects to receive additional COL applications.

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.

The challenges facing NRC and the agency's actions to address each challenge include the following:

##### **New Facilities**

##### **Issue:**

Instituting a Construction Inspection Program.

- Developing strong control processes for project management to ensure the agency meets its new reactor review and licensing objectives.
- Developing technical review processes.
- Ensuring a comprehensive standard review plan and adequately documented safety evaluation reports.

**Action:** NRC is taking a design-centered review approach to optimize the COL application review process. The Office of New Reactors is in the process of developing a new construction inspection program in accordance with 10 CFR 52. The new program of "inspections, tests, analyses, and acceptance criteria" has been integrated into the Part 52 licensing process to create a design-specific, pre-approved

set of performance standards. Licensees must meet these standards and the Commission must find that the standards have been met before the licensee can load fuel and operate the plant.

**Issue:** Ensure that the process for reviewing applications for new facilities meets the public's demand for new energy sources while focusing on safety and effectiveness.

**Action:** NRC's preparations have been focused on issuing reactor design certifications, revising the regulation that governs early site permits, and engaging in ongoing interactions with nuclear plant designers and utilities regarding prospective new reactor applications and licensing activities.

### **Existing Fleet**

**Issue:** Ensure the ability to review licensee applications for license renewals and power uprates submitted by industry in response to the Nation's demand for energy production.

**Action:** NRC continues to work with plant licensees to develop a schedule of anticipated license amendment requests for license renewals and power uprates. The agency has implemented a number of recommendations to improve the license renewal review process, to include closer management oversight of the renewal process, as well as provide additional guidance to standardize the content of NRC's license renewal review reports.

**Issue:** Respond to a heightened public focus on license renewals resulting in contested hearings.

**Action:** NRC has open dialogs with the industry, licensees, and stakeholders, and appropriate comments have been incorporated into new inspection procedures. NRC staff explained details of the new procedures during breakout sessions at the agency's 2008 Regulatory Information Conference.

**Issue:** Ensure the ability to identify emerging operating and safety issues at all plants, including issues associated with extended and uprated licenses; consistently apply regulatory and review changes in response to these emerging issues across the existing fleet of reactors.

**Action:** Annually, agency staff communicate the status of the power uprate program to the Commission. The staff is currently revising Inspection Procedure 71004 to provide additional guidance on inspection planning, implementation, and documentation.

**Issue:** Establish and maintain effective, stable, and predictable regulatory programs or policies for all programs.

**Action:** NRC continues to interface with stakeholders, develop regulatory policy, update rules and technical guidance, provide technical lead and management for the Reactor Oversight Process, and support the development of programmatic changes when needed.



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## **CHALLENGE 5**

### ***Oversight of radiological waste.***

High-level radioactive waste is primarily in the form of spent nuclear fuel generated from commercial nuclear power reactors. NRC faces significant issues involving the potential licensing of the proposed Yucca Mountain repository for storing high-level radioactive waste. Additional challenges in the high-level waste area include the interim storage of spent nuclear fuel, certification of storage and transportation casks, and the oversight of decommissioned reactors and other nuclear sites.

Additionally, the amount of low-level waste continues to grow; however, no new disposal facilities have been built since the 1980s and unresolved issues will grow as the once-operational disposal facilities shut down.

The challenges facing NRC and the agency's actions to address each challenge include the following:

**Issue:** Address increasing quantities of radiological waste requiring interim or permanent disposal sites.

**Action:** NRC developed and implemented a risk-informed decisionmaking framework in connection with a wide range of nuclear waste storage issues. The NRC has conducted reviews using the framework for dry cask waste storage systems and concluded that such systems provide a safe means to store spent nuclear fuel with exceedingly low risk.

**Issue:** Address issues regarding the license application to construct a high-level radioactive waste repository at Yucca Mountain.

**Action:** The NRC received the Yucca Mountain license application from DOE in June 2008. Consistent with direction in the Nuclear Waste Policy Act and the Energy Policy Act, the agency has been conducting high-level waste pre-licensing activities to ensure appropriate standards and regulatory guidance are in place. Additionally, NRC is interacting with the applicant, the DOE, such that the licensing review for a potential Yucca Mountain high-level waste repository can be conducted in 3 to 4 years as directed by Congress. NRC is also preparing to publish a final revision to 10 CFR Part 63 to align agency regulations to new Environmental Protection Agency standards for radiation protection at a high-level waste repository.

**Issue:** Oversight of low-level waste disposal, including low-level radioactive waste disposal sites.

**Action:** NRC has informed fuel cycle and materials licensees about the potential need to store some low-level radioactive waste onsite for an extended period after the low-level waste disposal facility in Barnwell, South Carolina, closed. NRC-updated guidance advises licensees to consider ways to minimize production of Class B and C low-level waste.

**Issue:** Oversight of nuclear waste issues associated with the decommissioning and cleanup of nuclear reactor sites and other facilities.

**Action:** NRC continues to hold public meetings with stakeholders and licensees to explore safe and secure storage options associated with decommissioning of plants, such as transitioning from spent pool storage to dry cask storage.

## **CHALLENGE 6**

### ***Implementation of information technology and information security measures.***

NRC needs to continue upgrading and modernizing its IT capabilities both for employees and for public access to the regulatory process. Recognizing the need to modernize, the Office of Information Services established goals to improve the productivity, efficiency, and effectiveness of agency programs and operations, and enhance the use of information for all users inside and outside the agency. NRC also needs to ensure that system security controls are in place to protect the agency's information systems against misuse.

The issues related to this challenge and the agency's actions to address each issue include the following:

**Issue:** Upgrade and manage IT activities to improve the productivity, efficiency, and effectiveness of agency programs and operations.

**Action:** NRC recognizes that it continues to lag behind many other Federal agencies in terms of its IT infrastructure. For example, it recently upgraded software applications to include Microsoft Office Suite and Microsoft Outlook – both commonly used in the private and public sectors. In addition, the agency has begun to address longstanding telephone problems by upgrading the telephone system performance both with new enhanced features and service as well as bandwidth capabilities.

**Issue:** Implement a program to provide program office laptop computers with enhanced functionality, security, and support.

**Action:** The agency has set goals concerning laptops for the Office of Information Services to implement in the next several years. The agency has identified and is addressing its needs to (1) develop policies and standards for the use of laptop computers, (2) implement enterprise encryption and updating of operating systems to support the laptop program, and (3) provide secure wireless capability access. The use of laptop computers is expected to increase in the coming years.

**Issue:** Ensure that information systems are protected.

**Action:** The NRC Computer Security Office was formed to provide an increased capability to oversee the integration of security controls into all IT projects and operations and to improve the security of automated information. The position of Chief Information Security Officer was established as the head of this office.

**Action:** NRC has made progress in correcting the two significant deficiencies identified in the 2007 evaluation of the Federal Information Security Management Act concerning its information systemwide security controls. As of August 2008, more than half of the agency's systems were certified and accredited; however, the agency needs to certify and accredit all of its systems. The agency is working towards this goal and expects to complete all certifications and accreditations by the end of FY 2009.

**Action:** NRC is awarding a contract in excess of \$2 million to advance the organization's strengthening of security controls that protect NRC's information systems and information using a certification and accreditation process. By implementing this contract, NRC hopes to ensure that security controls for information systems are adequate, and that unauthorized access, use, disclosure, disruption, modification, or destruction of NRC's information systems or data can be detected and prevented.

## **CHALLENGE 7**

### ***Administration of all aspects of financial management.***

NRC management is responsible for establishing and maintaining effective internal controls and financial management systems that meet the objectives of several statutes including the Federal Managers' Financial Integrity Act. This act mandates that NRC 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 programmatic and administrative areas, as well as accounting and financial management.

The issues related to this challenge and the agency's actions to address each issue include the following:

**Issue:** Replace or upgrade the agency's current financial systems, which are obsolete, overly complex, and inefficient.

**Action:** In June 2008, the Chairman approved the Financial Accounting and Integrated Management Information System Implementation project. The new system, which will replace five aging financial systems<sup>5</sup> with a single integrated core financial system, is expected to be operational in October 2010.

**Action:** NRC completed the eTravel pilot. eTravel is a Governmentwide initiative to improve internal efficiency. The paperless system will automate travel documentation and approval routing of most travel arrangements. The lessons learned from the pilot are currently under review and may result in a delay of full implementation from the planned date of December 2008.

**Action:** NRC plans to implement the upgrade to the Time and Labor (T&L) System during the second half of FY 2009. The upgrade will provide a modern, Web-enabled version of the existing PeopleSoft T&L software. The system will include electronic approval of time, as well as other forms associated with leave and overtime/compensatory time.

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<sup>5</sup> The five financial systems are Federal Financial System, Fee Billing System, Allotment/Allowance Financial Plan System, Cost Accounting System, and the Capitalized Property System.

**Action:** In response to a business process improvement study that focused on time and labor and fee billing processes, the agency developed guidance for managing reporting codes. Initially, the number of reporting codes was reduced to fewer than 10,000; however, since January 2008, the number of codes has grown to approximately 20,000. The agency has issued further guidance and instituted a periodic review process to ensure that the new policy is consistently observed.

**Issue:** Ensure that the agency continues its efforts to monitor the effectiveness of existing controls over the fee billing process and implement additional controls to address weaknesses identified.

**Action:** NRC improved its internal control over fee billing by implementing additional detection controls. As a result, the agency's independent auditors downgraded the material weakness related to NRC's legacy Fee Billing System to a significant deficiency. The agency continues to conduct reviews to ensure that detection controls are working as intended and to seek ways to improve the fee billing certification process. These reviews have identified areas needing improvement.

In addition to the issues noted above, the agency has taken several steps to meet the challenge of administering all aspects of financial management. Those steps include implementing cross-servicing agreements for travel and contract support payment with an outside provider, evaluating the expansion of the cross-servicing effort to other NRC financial activities, and engaging in a thorough review of unliquidated funds, which resulted in funds being made available to fund high priority activities.

## **CHALLENGE 8**

### ***Managing human capital.***

NRC's human capital needs are changing due to the receipt of (1) applications to construct and operate the next generation of nuclear reactors, (2) DOE's license application to construct a nuclear waste repository, and (3) industry applications to increase the number of fuel cycle facilities. To effectively manage human capital as these changes progress, while continuing to accomplish the agency's mission, NRC must rigorously implement the following initiatives:

- Timely personnel security adjudication.
- Space planning.
- Recruitment and knowledge management.

The issues related to this challenge and the agency's actions to address each issue include the following:

**Issue:** Achieve timely personnel security adjudication. Work start dates for NRC employees, contractors, and licensees are frequently delayed due to the time-consuming personnel security adjudication process currently in place for granting access authorization.

**Action:** The agency is reviewing its hiring process for external applicants, which includes the entire hiring and security process that occurs from identification of an active vacancy through the entrance-on-duty date, and will develop recommendations to expedite the process.

**Action:** In accordance with Executive Order 13467 dated June 30, 2008, *Reforming Processes Related to Suitability for Government Employment, Fitness for Contractor Employees, and Eligibility for Access to Classified National Security Information*, NRC must develop reciprocity processes and procedures to accept applicable investigations and adjudications conducted by other Federal agencies.

**Action:** In November 2007, the Office of Administration hired two additional Personnel Security Specialists for the adjudication of personnel security cases. Three additional Personnel Security Specialists were brought on board during the summer of 2008.



**Action:** The Human Resources Recruitment Activity Tracking System was modified to include security processing/adjudication status information. Reports from this system are shared with the program offices to keep managers informed of the status of their new hires.

**Issue:** NRC must continue to accomplish the agency's mission during workspace related changes agencywide. In headquarters, changes involve the use of multiple headquarters office buildings at various sites in Montgomery County, Maryland.

**Action:** NRC is implementing a Headquarters Strategic Housing Plan designed to meet space needs through FY 2009. This plan addresses workspace needs, workflow, and business processing structures. Beginning in 2013, the agency expects to begin occupying a new permanent building in an effort to reconsolidate headquarters staff. Once the moves to the new permanent building are complete, the agency will have headquarters staff consolidated in three buildings within the White Flint Complex. Furthermore, most NRC regional offices are seeking new office space for additional staff in order to meet increased workload demands.

**Issue:** NRC must continue to address anticipated increased workload demands and retirements with recruitment and knowledge management strategies.

**Action:** Since FY 2005 there have been 1,561 new employees added to the workforce.<sup>6</sup> In FY 2007, the agency exceeded its hiring goal of a 200 net gain of staff by bringing on board 417 new employees. During FY 2008, NRC is projected to bring on board 495 new employees with an estimated net gain of more than 200.

**Action:** NRC maintains a recruitment program that includes participation in approximately 80 recruitment events each year at colleges, universities, and professional conferences. Other initiatives include developing new recruitment displays and videos to show at recruitment events, hiring additional human resource staff to perform critical human resources work, and upgrading the agency's Web-based job application tool.

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<sup>6</sup> As of August 30, 2008, there were approximately 3,791 NRC staff.

**Action:** NRC is implementing knowledge management strategies<sup>7</sup> that include mentoring, early replacement hiring, and rehiring annuitants with or without use of a pension offset as applicable.<sup>8</sup> The agency also developed a knowledge management Web site, expressly for the purpose of retaining knowledge before key employees are promoted or retire.

#### **IV. CONCLUSION**

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The eight 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 successfully achieving the agency's mission and goals.

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<sup>7</sup> Knowledge management involves capturing critical information and making the right information available to the right people at the right time to assure that knowledge and experience of the current staff is passed on to the next generation of NRC staff.

<sup>8</sup> This flexibility allows NRC to rehire a retiree to fill a position at full pay if the agency has experienced difficulty in filling a position, or if a temporary emergency exists.

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## **SCOPE AND METHODOLOGY**

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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, OIG focused on determining (1) current challenges, (2) the agency's efforts to address the challenges during FY 2008, and (3) future agency efforts to address the challenges.

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 conducted this evaluation from June through August 2008. The major contributors to this report were Anthony Lipuma, Deputy Assistant Inspector General for Audits; Steven Zane, Team Leader; Beth Serepca, Team Leader; Sherri Miotla, Team Leader; and Judy Gordon, Senior Analyst.