October 6, 2006

MEMORANDUM TO: Chairman Klein

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

SUBJECT: INSPECTOR GENERAL'S ASSESSMENT OF THE MOST SERIOUS MANAGEMENT AND PERFORMANCE CHALLENGES FACING THE NUCLEAR REGULATORY COMMISSION (OIG-07-A-01)

The *Reports Consolidation Act of 2000* (the Act) 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 nine management and performance challenges that I consider to be the most serious. The list of nine challenges reflects the removal of one of the 2005 challenges and the addition of a new challenge.

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

cc: Commissioner McGaffigan
Commissioner Merrifield
Commissioner Jaczko
Commissioner Lyons

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EVALUATION REPORT

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

OIG-07-A-01 October 6, 2006

All publicly available OIG reports (including this report) are accessible through NRC's Web site at:
http:/www.nrc.gov/reading-rm/doc-collections/insp-gen/

EXECUTIVE SUMMARY

BACKGROUND

The *Reports Consolidation Act of 2000* (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.

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. As part of the evaluation, the Office of the Inspector General staff sought input from NRC's Chairman, Commissioners, and NRC management to obtain their views on what challenges the agency is facing and what efforts the agency has taken to address previously identified management challenges.

RESULTS IN BRIEF

The IG identified nine challenges that he considers are the most serious management and performance challenges facing NRC. The challenges identified represent critical areas or difficult tasks that warrant high-level management attention. Additionally, the IG identified one of the 2005 management challenges, *Intra-agency communication (up, down, and across organizational lines),* to be removed. The chart that follows provides an overview of the nine most serious management and performance challenges as of September 30, 2006.

Most Serious Management and Performance Challenges Facing the Nuclear Regulatory Commission* As of September 30, 2006 *(as identified by the Inspector General)*	
Challenge 1	*Protection of nuclear material used for civilian purposes.*
Challenge 2	*Protection of information.*
Challenge 3	*Development and implementation of a risk-informed and performance-based regulatory approach.*
Challenge 4	*Ability to modify regulatory processes to meet a changing environment.*
Challenge 5	*Implementation of information resources.*
Challenge 6	*Administration of all aspects of financial management.*
Challenge 7	*Communication with external stakeholders throughout NRC regulatory activities.*
Challenge 8	*Managing human capital.*
Challenge 9	*Ability to meet the demand for licensing new reactors.*
The most serious management and performance challenges are not ranked in any order of importance.	

CONCLUSION

Although the nine challenges identified in this report are distinct, they are also interdependent. The overarching challenge of managing human capital is the cornerstone to effectively addressing all other management and performance challenges. The agency took considerable action to address one of the 2005 management challenges to justify its removal and has taken action regarding the management and performance challenges identified in this report.

However, continuing management attention and emphasis on the management and performance challenges is essential to achieving significant progress for each challenge.

ABBREVIATIONS AND ACRONYMS

ADAMS	Agencywide Documents Access and Management System
CEAR	Certificate of Excellence in Accountability Reporting
CFR	United States Code of Federal Regulations
COL	Combined Operating Licenses
EDO	Executive Director for Operations
FAR	Federal Acquisition Regulation
FISMA	Federal Information Security Management Act
HSPD	Homeland Security Presidential Directive
IG	Inspector General
NBC	National Business Center
NMMSS	Nuclear Materials Management and Safeguards System
NMSS	Nuclear Material Safety and Safeguards
NRC	Nuclear Regulatory Commission
OCFO	Office of the Chief Financial Officer
OIG	Office of the Inspector General
OMB	Office of Management and Budget
PII	personally identifiable information
PRA	probabilistic risk assessment
ROP	Reactor Oversight 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* (the Act), 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. 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 his list of management and performance challenges.

As part of the evaluation, OIG sought input from NRC's Chairman, Commissioners, and NRC management to obtain their views on what challenges the agency is facing and what efforts the agency has taken to address previously identified management challenges. Also, this report includes a listing of OIG audit and investigative reports issued during FY 2006 that address the challenges identified.

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 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 the aforementioned definition and criteria, 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 management attention. The chart that follows provides an overview of the nine management challenges. The sections that follow provide more detailed descriptions of the challenges, descriptive examples related to the challenges, and examples of efforts the agency has taken or are underway to address the challenges. The most serious management and performance challenges that follow are not ranked in any order of importance. Eight of the nine challenges are essentially the same as last year. However, this year the IG identified a new management and performance challenge titled: *Ability to meet the demand for licensing new reactors*. Additionally, the IG identified one 2005 management challenge*, Intra-agency communication (up, down, and across organizational lines),* to be removed.

Most Serious Management and Performance Challenges Facing the Nuclear Regulatory Commission As of September 30, 2006 *(as identified by the Inspector General)*

Challenge 1	*Protection of nuclear material used for civilian purposes.*
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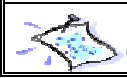

The most serious management and performance challenges are not ranked in any order of importance.

Removal of 2005 Management Challenge 8: *Intra-Agency Communication*

As a result of various actions taken by NRC to improve internal communications, last year's management challenge number 8, *Intra-agency communication (up, down, and across organizational lines)*, was removed. The results of a 2005 survey of NRC employees, as reported in the *NRC Safety Culture and Climate Survey Executive Summary 2005*, illustrate that the agency's commitment to internal communications has paid dividends. The Executive Summary noted that the staff's response to questions in the category of communication[1] showed the highest improvement of all categories over the 2002 survey results.

NRC's Strategic Plan stresses the importance of the role of internal communications in achieving the agency's mission and goals. Accordingly, the agency's Communications Council is actively involved in planning, coordinating, implementing, and improving NRC internal communications strategies. The main impetus of the Council is to address internal communication issues. The Council engages staff from around the agency to assist with projects requiring multiple office input, coordination, and agreement.

During FY 2006, NRC continued to improve and maintain several mechanisms to enhance its internal communications. For example:

- the Executive Director for Operations (EDO) issues periodic electronic "EDO Updates" to NRC staff highlighting current events around the agency.

- the NRC Reporter, an internal use only publication, is designed to communicate a quick overview of what's happening all over the agency.

- NRC issues Announcements (formerly Network Announcements) to communicate information of major significance or interest to agency employees, as well as urgent or time-sensitive information.

1 Communication: The survey evaluated the availability of information about matters affecting the agency, and information employees need to do their job. It also assessed the degree of openness that employees have with speaking up in the NRC; measured employees' understanding of the goals and objectives of their work unit, division, office/region, and NRC as a whole and the NRC Strategic Plan. In addition, employees' awareness of NRC's plans, performance, and mission were evaluated. This category also measured the effectiveness of various internal communication vehicles.

- NRC also issues Yellow Announcements to communicate new policies, practices, or procedures; to introduce changes in policy, senior staff assignments, or organization; or to address major agency-wide events.

Also, NRC's Internal website provides employees with information on (1) different ways to address intra-agency concerns such as the Differing Professional Opinions Program, Discrimination Complaints, Employee Concerns Overview, and clarification of ethics in the workplace.

Finally, NRC continues to hold an annual "All Employees" meeting as a mechanism for direct two-way communication between the Commission and agency staff. The Office of the Executive Director for Operations' internal webpage provides guidance to the staff, including guidance on communicating with the Commission.

While the agency has taken considerable action that would justify the removal of the 2005 Management Challenge number 8, *Intra-agency communication*, assuring effective intra-agency communication remains critical to successfully carrying out the agency's mission. Apart from the positive results of the 2005 Safety Culture Climate Study, the IG continues to see instances where the agency has experienced difficulty in communicating across programs.

Continued focus on across-the-agency communications is needed to address this area. Therefore, although the IG removed this as one of the most serious management and performance challenges, OIG will continue to monitor this issue.

CHALLENGE 1
Protection of nuclear material used for civilian purposes.

NRC's Strategic Plan provides for "Excellence in regulating the safe and secure use and management of radioactive materials for the public good." NRC is authorized to grant licenses for the possession and use of radioactive materials (e.g., byproduct material,[2] source material,[3] and special nuclear material[4]) and establish regulations to govern the possession and use of those materials. NRC's regulations require that certain materials licensees have extensive material control and accounting programs as a condition of their license. All other license applicants (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.

One of NRC's and the nuclear industry's highest priorities must be ensuring adequate protection of public health and safety. Heightened sensitivity to the control of special nuclear materials warrants NRC's serious attention to its licensees' material control and accounting activities. Similarly, the control and accounting of licensed byproduct material also warrants attention. The challenges currently facing NRC in the area of protecting nuclear materials are to:

- ensure adequate inspections to verify licensees' commitments to their material control and accounting programs;

- ensure reliable accounting of special nuclear materials in the NRC and Department of Energy's jointly managed Nuclear Materials Management and Safeguards System (NMMSS); and

2 Byproduct material – (1) Any radioactive material (except special nuclear material) yielded in or made radioactive by exposure to the radiation incident to the process of producing or using special nuclear material and (2) the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content. [Source: Atomic Energy Act of 1954, Section 11 (e)]
The Energy Policy Act of 2005 expanded the definition of byproduct material, as defined in Section 11(e) of the Atomic Energy Act, to include certain discrete sources of radium, certain accelerator-produced radioactive material, and certain discrete sources of naturally occurring radioactive material, placing these materials under NRC jurisdiction.

3 Source material – Uranium or thorium or any combination thereof, in any physical or chemical form; or ores that contain by weight 0.05 percent or more of (1) uranium, (2) thorium, or (3) any combination thereof. Source material includes depleted uranium and natural uranium, but not "special nuclear material." [Source: Title 10 Code of Federal Regulations (CFR) Part 40.4]

4 Special nuclear material – Plutonium, uranium-233, uranium enriched in the isotopes uranium-233 or uranium-235, and any other material which the Commission, pursuant to the provisions of Section 51 of the Atomic Energy Act of 1954, as amended, determines to be special nuclear material, but does not include source material; or any material artificially enriched by any of the foregoing, but does not include source material. [Source: Title 10 CFR Part 74.4]

- establish an effective system to ensure the accurate tracking for byproduct material, especially those with the greatest potential to impact public health and safety.

Special Nuclear Material

The agency has made progress in improving the reliability of licensee-reported special nuclear material inventory balances recorded in the NMMSS, and has increased efforts to hold licensees accountable for the control and accounting of special nuclear material. NRC increased its oversight of the jointly managed system and required interim inspections to validate the accuracy of licensee-reported inventory data to NMMSS. However, the staff awaits final Commission endorsement on a proposed revised rule to address regulatory improvements to the NMMSS.

Byproduct Material

The NRC is developing a National Source Tracking System to improve accountability and tracking of byproduct material. The system is proposed as a cradle to grave tracking system of high risk sealed sources. It is intended to:

- improve accountability and control for nationally tracked sources;
- improve the understanding of the location of nationally tracked sources;
- improve regulatory efficiency;
- enhance NRC's ability to promote and maintain the public health and safety and common defense and security; and
- increase public confidence.

However, because the agency did not consider all viable options in its analysis of the system, the National Source Tracking System may be inadequate. Specifically, the proposed tracking system may not account for all byproduct material that represents a risk to the common defense and security and public health and safety.

NRC implemented measures to improve the nation's security of radioactive material. For example, NRC issued advisories to byproduct material licensees that emphasized the importance of the security and control of licensed material. NRC also issued security-related orders to the largest material licensees. These orders addressed potential vulnerabilities in the storage, transportation, and

access of byproduct material among the licensees. In addition, NRC worked with the Department of Energy to facilitate recovery of selected orphaned sources.[5]

Related Office of the Inspector General Work

Audits

- Audit of NRC's Office of Nuclear Security and Incident Response
- Audit of the Development of the National Source Tracking System
- Audit of the NRC Byproduct Materials License Application and Review Process
- Audit of the Baseline Security and Safeguards Inspection Program
- Audit of NRC's Oversight of Agreement States' Licensing Actions

Investigations

- NRC's Oversight of Force-On-Force Program
- NRC's Handling of Preemption Matters
- NRC's Regulation of a Materials Licensee
- NRC Oversight of Licensee's Site Access Authorization Programs
- NRC Oversight of Research Test Reactors
- NRC's Oversight of Releases of Radioactive Material at the St. Lucie Nuclear Power Plant
- NRC's Regulatory Oversight of Gaseous Fire Extinguishing Systems
- Counterfeit NRC Licensing Documents
- NRC's Handling of Security Issues at Shearon Harris Plant

5 Orphaned sources are those radioactive sources that become lost or abandoned and may wind up in non-nuclear facilities, such as scrap yards, steel mills, and municipal waste facilities.

CHALLENGE 2
Protection of information.

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

As a result of continuing terrorist activity worldwide, NRC continually reexamines its document control policies. NRC is faced with the challenge of attempting to balance the need to protect sensitive information from inappropriate disclosure against its goal of openness in its regulatory processes. Over the past year, NRC has made various efforts to protect sensitive information, including personal information, from inappropriate disclosure.

Sensitive Unclassified Non-Safeguards Information

The agency is revising a policy to ensure that sensitive unclassified non-safeguards information (SUNSI) is properly handled and marked, and adequately protected from unauthorized disclosure. SUNSI refers to any information that, if lost, modified inappropriately, or accessed by unauthorized individuals, could reasonably be foreseen to harm the:

- Public interest;
- Commercial or financial interests of the entity or individual to whom the information pertains;
- Conduct of NRC and Federal programs; and
- Personal privacy of individuals.

An initial SUNSI policy, that became effective in October 2005, required staff to determine which of seven categories best applied to documents generated within NRC and apply specific protective measures commensurate with the categorization.

In June 2006, however, the Commission disapproved the SUNSI policy. It imposed a simplified policy, including a two-tiered categorization that incorporates the existing seven SUNSI categories. The simplified two-tiered approach is intended only to be an interim process. A final policy will need to incorporate a December 16, 2005, Presidential Memorandum requiring the standardization of acquisition, access, retention, production, use, management, and

sharing of sensitive but unclassified information across the Federal Government. In an e-mail to the OIG, one Commissioner acknowledged that the SUNSI policy needs to be reevaluated, and requested that it be included as an audit in the fiscal year 2007 OIG audit plan. OIG included this suggestion in the FY 2007 Annual Plan.

Security Inspection Report Information

Another challenge for NRC is the necessary restriction of public access to information from the security oversight program for nuclear power plants, fuel cycle facilities, and other licensed activities. Restricting public access to licensees' security performance information is necessary to protect the Nation from harm that could result if this information was misused by those with malevolent intentions. However, the staff has had difficulty achieving NRC's goal of openness with regard to sharing licensees' security performance information with the public due to this restriction.

The Commission took action to address this challenge in April 2006 when it made security inspection report cover letters publicly available. By reviewing these cover letters, members of the public can learn that an NRC inspection was conducted at a particular facility and whether any deficiencies were found.

Other Security-related Information

NRC will continue to face challenges regarding the protection of sensitive information in a post-9/11 environment. Agency initiatives undertaken to address this issue have resulted in some improvements. For example, the agency used to develop and distribute security advisories outside of the agency's established framework. Recognizing that these security advisories are a form of generic communications, the agency now processes them through the agency's formal Generic Communications Program. However, more needs to be done to ensure consistent understanding and implementation by staff tasked with the protection of information.

Computer Security

Computer security is the necessary protection afforded to an information system to preserve the integrity, availability, and confidentiality of the information system resources. These resources include hardware, software, firmware, information/data, and telecommunications.

The Veterans Administration found that a laptop containing social security numbers was stolen from an employee's home. As a result, heightened concern over protecting personal information emerged across the Federal Government. Other agencies have also revealed

thefts of laptops. For example, in August 2006, the Department of Transportation disclosed that a laptop containing personally identifiable information on more than 130,000 people in the Miami region was stolen from an employee. Like other Federal agencies, NRC also faces the challenge of protecting personal information.

OIG examined NRC's practices regarding personal privacy information after it found such information, including social security numbers and dates of birth, on NRC network drives. NRC employees could have been at risk for identity fraud and the agency may not have been in compliance with the Privacy Act.

In response to the OIG report, on July 26, 2006, NRC's Chairman requested that staff review agency network drives to identify and remove any additional unnecessary personal privacy information required to be withheld. He also directed the staff to:

- Review the extent to which social security numbers and other personal privacy information are used for identification purposes or are required for agency business;

- Determine the vulnerabilities that such use creates; and

- Identify actions to mitigate the vulnerabilities, to minimize the use of this information and to eliminate any unnecessary use.

In an August 25, 2006, EDO Update to the staff, the Executive Director for Operations reported on the following specific actions planned and underway to protect personally identifiable information (PII):

- Mandatory information systems security training for all staff starting in the fall of 2006;

- Prohibition on removing paper documents that contain PII from NRC premises, unless the PII has been redacted or an exception has been granted;

- Formation of an interoffice task force to evaluate NRC's business processes that use PII;

- Update of guidance documents and modification of computer systems and peripheral devices will be modified to better protect PII, and

- Installation of encryption capabilities on certain computers.

Completion of these activities is integral to addressing this management and performance challenge to protect information.

Related Office of the Inspector General Work

Audits

- Evaluation of NRC's Efforts to Protect Sensitive Information
- Audit of NRC's Integrated Personnel Security System
- Audit of NRC's Office of Nuclear Security and Incident Response
- Office of the Inspector General Computer Security Audit of the Technical Training Center, Chattanooga, TN
- Office of the Inspector General Computer Security Audit of Region I – King of Prussia, PA
- Office of the Inspector General Computer Security Audit of Region II – Atlanta, GA
- Office of the Inspector General Computer Security Audit of Region III – Lisle, IL
- Office of the Inspector General Computer Security Audit of Region IV – Arlington, TX
- Evaluation of NRC's Implementation of the Federal Information Security Management Act (FISMA) for Fiscal Year 2006
- Evaluation of Personal Privacy Information Found on NRC Network Drives
- Audit of NRC's Implementation of Homeland Security Presidential Directive – 12 (HSPD-12)
- Audit of NRC's Process for Releasing Commission Decision Documents

Investigations

- Computer Security Inadequacies in the Office of Nuclear Regulatory Research
- Possible Compromise of NRC Privacy Act Data by NRC Contractor
- Identity Theft by NRC Employee
- Possible Unauthorized Release of Pre-decisional Information
- Possible Inappropriate Release of Safeguards Information

CHALLENGE 3
Development and 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.

In interviews, former Chairman Diaz, a staunch proponent of risk-informed regulation, stated that NRC has "done well" in adopting a risk-informed approach. However, he believed that risk-informed and performance-based regulation should have progressed faster than it has. He also stated that "it seems like things slow down" due to "communication and implementation, rather than the principles."

Probabilistic Risk Assessment

One particular challenge NRC faces is the integration of probabilistic risk assessment (PRA) into regulatory decision-making. PRA has been used by industry and NRC since the 1970s. PRA represents a methodology that can be used to determine (1) what can happen, (2) what is the likelihood, and (3) what are the consequences. NRC uses PRA in the regulatory process including licensing, rulemaking, the Reactor Oversight Process, and enforcement. The Commission has encouraged the use of PRA and its applications in all nuclear regulatory matters to the extent possible. This challenge reflects NRC's commitment to increase the use of PRA technology in all regulatory matters (1) to the extent supported by the state-of-the-art in PRA methods and data and (2) in a manner that complements the agency's approach and philosophy. Implementation of this practice is expected to improve NRC's regulation of licensees.

In FY 2006, NRC initiated an effort to address the quality of PRAs and develop standard regulatory risk-informed activities. However, full implementation of PRA quality standards will take a number of years. In addition, application of PRA to NRC's non-reactor regulatory activities (e.g., nuclear materials regulation) lags behind application of PRA in regulating commercial nuclear power reactors.

Commercial Nuclear Power Reactors

NRC has made progress in implementing a risk-informed and performance-based approach at the Nation's 103 operating commercial nuclear power reactors. For example, the NRC Reactor Inspection Program and Reactor Performance Assessment Program are combined to implement the revised Reactor Oversight Process (ROP). An integral part of the ROP is the baseline inspection program that was developed using a risk-informed approach to determine a list of areas to inspect within seven established cornerstones of safety. The baseline inspection program is the minimum inspection oversight that should be conducted at each nuclear power plant.

Application of the risk-informed, performance-based approach in the baseline inspection program requires continual refinement. As a living program, the agency dedicates resources to continually reassess and modify this program as necessary based on operating experience and industry performance. A recent ROP self-assessment recognized that regional inspection resources warrant a sizeable increase in full-time equivalents for FY 2007 and FY 2008. Potential short-falls in inspection resources pose a challenge to the agency to ensure that the risk-informed, performance-based approach applied in the baseline inspection program is up-to-date and reflects lessons learned.

Nuclear Materials Strategic Arena

NRC is still working to develop and implement a risk-informed and performance-based approach to its nuclear materials strategic arena. For example in May 2003, the OIG noted that the agency did not have a documented basis for the risk-informed approach to its oversight of licensees' material, control and accounting program. The OIG recommended that NRC document that basis. To address this recommendation, the agency is developing a new rule related to the oversight of special nuclear materials. As part of its rulemaking plan, NRC staff committed to completing documentation of the basis of its risk-informed approach. The rulemaking process is continuing.

Additionally, NRC amended 10 CFR Part 70, *Domestic Licensing of Special Nuclear Material*, to achieve its objectives of applying a risk-informed and performance-based regulatory approach for certain fuel cycle facilities. While NRC has made progress on implementing 10 CFR Part 70 revisions, it still has not completed the work.

Related Office of the Inspector General Work

Audits

- Follow-up Audit of the Nuclear Regulatory Commission's Decommissioning Fund Program
- Evaluation of NRC's Use of Probabilistic Risk Assessment (PRA) in Regulating the Commercial Nuclear Power Industry
- Perspective on NRC's PRA Policy Statement
- Audit of NMSS' Procedures for Processing Inspection Guidance
- Audit of NRC's Oversight of Agreement States' Licensing Actions

CHALLENGE 4
Ability to modify regulatory processes to meet a changing environment.

NRC faces the challenge of maintaining its core regulatory programs while adapting to emerging changes in its regulatory environment. These changes are listed in NRC's Strategic Plan. One particular change in the environment is of such significance that the IG has isolated it as a separate challenge (see Challenge 9). That is, NRC must address a growing interest in licensing and constructing new nuclear power plants to meet the Nation's demand for energy production. The anticipated workload associated with gearing up to receive license applications for new reactors will strain NRC's current resources. Preparing for the anticipated strain on resources intensifies the challenges posed by other changes in NRC's regulatory environment. While responding to the emerging demands associated with regulating new reactors, NRC must also sustain the technical quality in carrying out its current regulatory responsibilities. In particular, NRC must be able to adapt to:

- Uncertainty in the expected number of applications for license renewals submitted to NRC by industry in response to the Nation's demand for energy production;

- A heightened public focus on license renewals resulting in contentious hearings;

- Uncertainty in the expected number of licensee requests to increase power levels;

- Increasing quantities of radioactive waste requiring interim or permanent disposal sites; and

- Delays and uncertainties related to NRC's receipt and review of a Department of Energy license application to construct a high-level waste repository at Yucca Mountain.

Reactor License Renewals

NRC's license renewal program is one of the major elements of its regulatory work. In accordance with the Atomic Energy Act, NRC approves and issues licenses for commercial nuclear power plants to operate for up to 40 years. 10 CFR Part 54, *Requirements for Renewal of Operating Licenses for Nuclear Power Plants*, allows these plants to be renewed upon expiration of their existing licenses. Issuance of a renewed license allows a license to be renewed for up to 20 years. NRC could receive approximately 25 to 30 additional applications to renew operating licenses over the next several years.

Because the decision whether to seek a renewal is the responsibility of the nuclear power plant owner(s), anticipating the number of applications is a challenge to NRC. Recent agency experience reflects industry's strong interest in license renewal.

Additionally, NRC will encounter challenges related to a heightened public interest in license renewals that may lead to more contentious hearings. Until 2006, it was unlikely for NRC to grant hearings on license renewals. In 2006, however, NRC granted the first two such hearings and the license renewal staff anticipates more.

Licensee Requests to Increase Power Levels

Licensees have been using power uprates since the 1970s as a way to increase the power output of their nuclear power plants. Many licensees have formally requested NRC approval to operate their plants at a higher power level than the level authorized in the original license. As of August 2006, the NRC approved 112 power uprate increases, and 6 are pending review. Over the next five years, NRC expects 23 additional requests, which may affect the ability of NRC staff to maintain established review schedules.

To address the increase in power uprate requests, NRC is continuing to develop process improvements based on lessons learned from completed reviews. The process improvements include more detailed analysis of specific technical issues and related efficiencies. Some of the technical issues include power uprate testing programs and reactor systems methods. Also, NRC has implemented more rigorous acceptance reviews for power uprate applications to improve the efficiency of the process.

High-Level Waste Disposal

According to the Nuclear Waste Policy Act, the Department of Energy has the responsibility to locate, design, build, and operate a repository for high-level nuclear waste. NRC has the responsibility to license and regulate this facility. Over the past several years, NRC has been preparing its review plan in anticipation of the Department of Energy tendering its license application for the construction of a permanent repository at Yucca Mountain in Nevada.

Recently, the Department of Energy announced plans to submit a license application to NRC by June 30, 2008, and to initiate repository operations in 2017. However, the date that the Department of Energy will submit its license application continues to change. As a result, NRC is faced with the challenge of being prepared to receive and review the application whenever it comes in.

Once NRC receives the application, the agency has a congressionally mandated time frame of 3 years, with an optional year, to review the application and make its determination on the license.

NRC continues to prepare for receipt of the license application and is now focusing its efforts on pre-licensing activities. The agency's ability to modify regulatory processes to meet a changing environment will continue to be a prominent challenge for NRC in FY 2007, as it relates to NRC's high-level waste program.

Related Office of the Inspector General Work

Audits

- Audit of NRC's Office of Nuclear Security and Incident Response
- Audit of the Development of the National Source Tracking System
- Audit of the NRC Byproduct Materials License Application and Review Process
- Audit of the NMSS' Procedures for Processing Inspection Guidance

CHALLENGE 5
Implementation of information resources.

Federal agencies' acquisition and implementation of information resources is crucial to (1) support critical mission-related operations and (2) provide more effective and cost-efficient Government services to the public. The necessary link of information technology to NRC's mission performance makes it important to have decision-making processes which ensure that funds are invested and managed to achieve high value outcomes at acceptable costs. NRC relies on a wide variety of information systems to help it fulfill its responsibilities and support its business flow. NRC continues to work towards obtaining a good return on these investments. In recent years, NRC has created large databases of publicly available information, including the High-Level Waste Meta System, the Licensing Support Network, the NRC website, and the Agencywide Documents Access and Management System (ADAMS) public reading room.

The following sections highlight NRC's efforts to strengthen and support the agency's business needs using information technology strategies.

Information Security and Federal Information Security Management Act (FISMA) Compliance

NRC received a "D-" on its Federal computer security grade for 2005. The low grade primarily reflected that very few NRC system certifications and accreditations were current at the time the systems were reviewed for compliance with FISMA. The security certification and accreditation of information systems is integral to an agency's information security program and supports the risk management process required by FISMA. To ensure the agency's systems have adequate security controls to protect information resources, NRC engaged a contractor to enhance agency-wide information systems security. The approximate $41 million contract was awarded on July 28, 2006, and will be in place for five years. In its 2006 FISMA evaluation report, OIG identified two significant deficiencies in NRC's information system security program. While progress is being made on strengthening the program, more actions are needed to correct identified weaknesses.

Homeland Security Presidential Directive 12 (HSPD-12)

On August 27, 2004, the President signed HSPD-12 requiring implementation of a mandatory governmentwide standard for secure and reliable forms of identification for Federal employees and contractors. It directed Government departments and agencies to require Federal employees and contractors to use identification that meets the standard to gain physical and logical access to Federal facilities and information systems. Subsequent Federal guidance split requirements into two parts. The first part required agencies to verify the identity of individuals applying for official agency badges. The second part provided detailed specifications to support using a common identification standard for Federal employees and contractors.

On October 27, 2005, NRC implemented part one requirements in compliance with the Office of Management and Budget's (OMB) deadline. Implementation of the first part of the process did not require major adjustments to NRC's existing personnel security program. In August 2006, OIG reviewed the agency's efforts to date and found that while NRC implemented the first part in compliance with OMB's deadline, several improvements were needed.

The second part of the process involves issuing standard badges and acquiring the technology to integrate usage of the cards into agency security practices. OMB established October 27, 2006, as the date that Federal agencies are to begin issuing badges compliant with the new standard. NRC recognizes that it will be a challenge to implement the requirements on a timely basis. It is considering approaches as to how to best implement these requirements and intends to meet the October 2006 deadline.

Microsoft Office Deployment

NRC is developing a plan to deploy Microsoft Office Professional software suite, including Word, Excel, Powerpoint, and Access to all agency desktop computers. Microsoft Office products will become the agency's standard within the coming year. During the implementation, Corel WordPerfect will remain the agency's standard word processing format. Once MS Word has been installed agency wide and declared the new agency standard, Corel WordPerfect will be available on desktop computers for up to one year. The EDO explained the agency's position on this matter in an EDO Update, dated August 25, 2006. The change will need to involve training the staff to facilitate the transition to the use of the new software.

Agencywide Documents Access and Management System (ADAMS)

ADAMS is an information system that allows access to image and text documents that NRC has made public since November 1, 1999, as well as bibliographic records that NRC made public before November 1999. ADAMS permits full-text searching and enables users to view document images, download files, and print documents locally. The Office of Information Services is planning to update ADAMS and then replace it in 2010. This strategy consists of the following major activities necessitating end user involvement:

- Conducting an analysis of the features and capabilities of document management systems currently on the market with respect to agency requirements;
- Improving the present system to the extent possible;
- Updating the existing system in a carefully planned manner to achieve a smooth transition; and
- Acquiring and implementing a replacement document management system by securing a suitable product at a reasonable cost.

This change will present a major challenge to NRC. ADAMS initial cost exceeded agency estimates, took longer to become operational than anticipated, and initially failed to produce significant improvements in document management. The challenge will be to incorporate ADAMS previous lessons learned for an effective transition to a new system.

Related Office of the Inspector General Work

Audits

- Audit of NRC's Integrated Personnel Security System
- Audit of NRC's Implementation of Homeland Security Presidential Directive – 12 (HSPD-12)

CHALLENGE 6
Administration of all aspects of financial management.

Financial management challenges include—

- Preparation of financial statements in accordance with applicable requirements;
- Financial systems replacement;
- Sound budget formulation planning; and
- Efficient and effective procurement operations.

A brief discussion of these challenges follows.

Preparation of Financial Statements

For the fifth consecutive year, the NRC received the Certificate of Excellence in Accountability Reporting (CEAR Award) for the FY 2005 Performance and Accountability Report. The CEAR Program, sponsored by the Association of Government Accountants, was established in conjunction with the Chief Financial Officers Council and the OMB. Its goal is to improve financial and program accountability by streamlining reporting and improving the effectiveness of such reports.

NRC received an unqualified audit opinion on its FY 2005 financial statements. However, the agency's independent auditors continued to characterize NRC's legacy Fee Billing System as a material weakness and as a Federal Financial Management Improvement Act substantial non-compliance. The lack of system functionality for the agency's Fee Billing System, coupled with the age of the system, and a reliance on manual processes, is the underlying cause of the material weakness.

In FY 2005, the NRC implemented a number of internal control measures to mitigate the effects of the system deficiencies. Those measures include performing a license fee reconciliation, modifying the Fee Billing System to improve the functionality of the interfaces, expanding acceptance testing for software modifications, conducting an independent verification and validation of the software modifications, and separating the billing and reconciliation functions.

In FY 2006, the NRC conducted a comprehensive internal control assessment and identified additional internal control improvements. These include performing automated interface validation procedures, implementing an exception reporting process, expanding manual validation procedures to include a contract cost reconciliation, and performing statistical sampling to validate the billing of small material invoices.

While the agency has made progress in developing a variety of quality control procedures, the challenge remains to mitigate known design and system risks of the legacy system and to assert to the completeness and reliability of the fee billing process.

Financial Systems Replacement Project

The financial systems replacement project, as currently planned, involves the replacement of the NRC's core accounting system (the Federal Financial System), the License Fee Billing System, and the Human Resources Management System.

NRC implemented the Federal Financial System as their core accounting system in October 1992. The National Business Center (NBC), Department of the Interior, hosts this system for the agency. NBC notified all customer agencies in a March 30, 2006, letter, that the corporate owner of the system advised that the Federal Financial System is no longer compliant with Federal standards for financial management systems. Accordingly, any upgrades or enhancements to this system have been discontinued. Therefore, NBC will no longer provide services on the Federal Financial System effective October 1, 2010.

The License Fee Billing System is actually a combination of nine separate systems used to accomplish license fee billing. The systems that comprise the License Fee Billing System were developed piecemeal over many years to accomplish fee billing. The system software is outdated, requires too much manual intervention, and was not designed to include the internal control and data auditing features expected in contemporary financial applications.

The agency is facing the challenge of replacing the Federal Financial System and the License Fee Billing System by creating a new organizational unit, the Financial Systems Development Staff. NRC determined that it would be more efficient to place replacement efforts under one modernization group that would focus exclusively on these important projects.

Budget Formulation

To accomplish the agency's mission, NRC must maintain a long-range planning and budgeting process. The process must provide for adequate consideration of contingencies and changing priorities so that resources are assigned commensurate with program requirements. Overall, NRC faces the following challenges in planning the FY 2008 budget:

- Planning for license applications for new reactors - The projected number of license applications can, and has, changed. The assumption used in the FY 2008 budget is 13 license applications expected to be submitted during FY 2007 and FY 2008. However, uncertainties exist regarding whether some utilities may decide to accelerate or decelerate their applications.

- Planning for receiving a license application for the high-level waste repository at Yucca Mountain - In the Nuclear Materials and Waste Safety arena, uncertainties in timing and approach associated with the Department of Energy's plan for submitting a license application for the high-level waste repository at Yucca Mountain present a challenge for budget formulation. The assumption used in the FY 2008 budget is that the Department will submit the license application in June 2008 with NRC having 6 months to docket. However, the date that the Department will submit its license application continues to change, posing the challenge for NRC to be prepared to receive and review the application whenever it comes in.

- Implementation of a new budget system - NRC procured a vendor to integrate a new budget system and planned to test it with FY 2008 budget data in parallel with the existing process. However, because the new budget system requires "certification and accreditation," and has not been granted authorization to operate, NRC could not test it as planned. Consequently, the agency must wait until the FY 2009 budget cycle to test the new system.

Procurement

NRC's procurement of goods and services must be made in accordance with Federal regulations and with an aim to achieve the best value for the agency's dollars in a timely manner. Agency policy provides that the NRC's procurement of goods and services support the agency's mission and be planned, awarded, and administered efficiently and effectively. During FY 2005, the Division of Contracts (with 32 full-time employees) completed 1,849 procurement actions

totaling $109.2 million. There are numerous challenges facing the agency in the procurement area. Some of these challenges, as well as certain actions the agency is taking to address them, are mentioned below:

- Hiring and training new contract personnel - In the past 15 months, the Division of Contracts hired 17 new employees, with 3 additional staff expected to start in the upcoming fiscal year. The new staff will require training on NRC regulations and procedures to become productive team members. Accordingly, the Division of Contracts has developed a list of training topics for presentation to new employees.

- Keeping current with changes to the Federal Acquisition Regulation (FAR) - Employees new to the Division of Contracts will receive training on FAR as part of the training presentations described above. However, existing employees may not have had FAR training recently and may not be aware of changes. A Division of Contracts staff member has been identified to monitor the revisions to the FAR by the Civilian Acquisition Council and to keep the other Division of Contracts staff informed of those changes.

- Obtaining contract audit services - The Division of Contracts continues to coordinate with OIG to obtain needed contract audits. This includes audits of contracts that are complete and in closeout status, active contracts with significant dollars expended, as well as pre-award audits on proposed contracts.

- Closing expired contracts and deobligating excess funds – The FAR promulgates time standards by which contracts should be closed out and money deobligated. The agency has made progress in closing out its old expired contracts, thereby deobligating excess funds and making those funds available for other agency priorities. During FY 2006, the agency closed 87 old expired contracts and deobligated the excess funds to make those funds available for other agency priorities.

Related Office of the Inspector General Work

Audits

- Results of the Audit of the United States Nuclear Regulatory Commission's Financial Statements for Fiscal Years 2005 and 2004
- Independent Auditors' Report on the U.S. Nuclear Regulatory Commission's Special-Purpose Financial Statements as of September 30, 2005, and 2004, for Years then Ended
- Independent Accountant's Report on the Application of Agreed-Upon Procedures on the Closing Package Intragovernmental Activity and Balances as of September 30, 2005
- Review of NRC's Implementation of the Federal Managers' Financial Integrity Act for Fiscal Year 2005

Investigations

- Failure to Report Contractor Payment Error to OIG Auditors
- Review of Court Reporting Services Contract Organizational Conflict of Interest by NRC Contractor
- Review of NRC's Oversight of the Management of the Parking Garage Contract
- False Claim by NRC Licensee of Small Business Status
- Review of NRC's Workers' Compensation Program
- Possible Improper Worker's Compensation Claim
- Adequacy of Controls by Office of Nuclear Regulatory Research Managers of Research Expenditures
- Review of NRC's Management of the Small Disadvantaged Business Program

CHALLENGE 7
Communication with external stakeholders throughout NRC regulatory activities.

The NRC has stated that nuclear regulation is the public's business and, therefore, it should be transacted in an open and candid manner in order to maintain the public's confidence. The continuing challenge for management is to ensure that there are effective ways of communicating with and obtaining information from external stakeholders (e.g., public meetings, workshops). Effective communication is vital and can have a significant impact on the agency achieving its goals.

NRC established a strategic goal to ensure openness. That goal expressly recognizes that the public must be informed about, and have a reasonable opportunity to participate in, the regulatory processes. NRC states that public involvement in, and information about, its activities is the cornerstone of strong, fair regulation of the nuclear industry. The agency has long acknowledged the public's interest in the regulation of nuclear activities, and therefore, provides opportunities for citizens to be heard.

Due to the nature of its business, the agency needs to interact with a diverse group of external stakeholders (e.g., the Congress, general public, other Federal agencies, and various industry and citizen groups) with clear, accurate, and timely information about NRC's regulatory activities.

The agency enhanced its outreach to better involve external stakeholders in NRC's business in several ways. The agency responded to an extraordinary high number of stakeholder requests for more information and to numerous Congressional inquiries. The agency also conducted extensive interviews with the media and meetings with residents of local communities and state and local government officials to discuss new initiatives, reported events, and other significant regulatory activities. For instance:

- NRC encourages public participation and comments applicable to new reactor licensing activities through open meetings, commission meetings, advisory committee meetings, and other opportunities open to the public.

- Public meetings between NRC's technical staff and applicants or licensees are open for interested members of the public to attend. In this case, members of the public attend in accordance with the "Commission Policy Statement on Staff Meetings Open to the Public."

Compliance with the Freedom of Information Act

In this post-9/11 environment, NRC continues to face challenges with determining an appropriate balance between its strategic goal of openness and the need to protect sensitive information. The agency has traditionally committed to the principles of openness, fairness and due process. In addition, the Freedom of Information Act requires Federal agencies to make information available to the general public by request or through automatic disclosure of certain types of information. Although the agency has a process for handling Freedom of Information Act requests from external stakeholders, OIG found weaknesses in the agency's internal controls needed to ensure compliance with requirements to automatically disclose information to the public. The agency faces the challenge to reconcile its position regarding public release of information.

Related Office of the Inspector General Work

Audits

- Audit of NRC's Controls Over Video News Release
- Audit of NRC's Process for Releasing Commission Decision Documents

Investigations

- NRC's Handling of Preemption Matters

CHALLENGE 8
Managing human capital.

NRC's ability to successfully execute activities in support of its mission depends on a highly skilled and experienced workforce. NRC continues to be challenged by growth in new work at a time when senior experts are increasingly eligible to retire. Over the next 5 years, NRC expects a substantial increase in work related to:

- new reactor licensing applications;
- the Department of Energy's license application for the Yucca Mountain high-level waste repository;
- industry applications to increase the number of fuel cycle production facilities; and
- potential NRC involvement in the Global Nuclear Energy Partnership.

To mitigate the impact of these challenges, the agency:

- Established a Human Capital Council to find, attract, and retain staff who possess critical skills;
- Continued implementation of a space optimization plan;
- Implemented human capital provisions of the Energy Policy Act of 2005;
- Identified staffing/training and development needs;
- Moved forward with knowledge management strategies; and
- Monitored the attrition rate.

Human Capital Council

In July 2006, the EDO established the Human Capital Council. The Council's goal is to provide an agency-level forum for the formulation of strategies to address human capital challenges, share best practices, and develop an integrated approach to address human capital issues.

Space Planning and Management

The agency is working to address the challenge of ensuring that enough workstations are available to keep pace with continued growth in headquarters hiring. NRC continues to implement its space optimization initiative to create additional workstations throughout the White Flint Complex, including temporary construction of workstations in conference rooms and restricting additional onsite contractors. The plan includes moving the Professional Development Center offsite to Bethesda, Maryland, which will allow for the construction of additional workstations. NRC's Document Processing Center contractor will be relocated within Headquarters which will also create space for additional workstations for staff use.

In order to meet NRC's growth needs, additional office space has been selected. The site has undergone a complete renovation during which the building infrastructure was replaced. Some NRC staff is projected to move into the new building during January 2007. Finally, the agency is working with the General Services Administration to pursue the acquisition of additional headquarters office space to meet NRC's near-term and long-term requirements. For the foreseeable future, ensuring that adequate office space is available for all new employees will be a significant challenge for the agency.

Energy Policy Act of 2005

The Energy Policy Act of 2005 includes human capital provisions that will assist the agency in increasing its workforce and assuring that its workforce has the knowledge and skills necessary to prepare for anticipated new reactor license applications. The agency is implementing a provision that authorizes it to pay Federal retirees, who are hired as consultants, their full salary without pension offset. This provision applies to positions for which there is exceptional difficulty in recruiting or retaining qualified employees. It is currently being used to accomplish different agency tasks and to recover critical skills and transfer critical knowledge.

Staffing/Training and Development

NRC needs a results-oriented workforce with the requisite talents, multidisciplinary knowledge, and current skills to ensure that it is equipped to accomplish its mission and achieve its goals. Acquiring and retaining a workforce with the appropriate knowledge and skills demands that NRC improve its recruiting, training, development, and retention approaches so that the agency can compete for and retain talented people.

Also, NRC faces a challenge to continually identify emerging critical skill needs, sustain hiring momentum into the future, and retain personnel as the industry staffs up for new plant construction. The agency expects to hire approximately 1,300 new employees between FYs 2006 and 2009. During the same time period, NRC anticipates providing technical training for approximately 11,523 students. NRC's ability to effectively review and license the new generation of commercial nuclear reactors will depend significantly on how well employees are trained and developed into effective reviewers and regulators at the staff and senior management level. Ongoing agency programs such as the Nuclear Safety Professional Development Program and Graduate Fellowship Program help to train staff to carry-out the agency's mission and functions.

Knowledge Management

Knowledge management involves capturing critical information and making the right information available to the right people at the right time. It is a part of the strategic management of human capital. Knowledge management is a critical strategy for assuring that knowledge and experience of the current staff is passed onto the next generation of NRC staff. The issue of knowledge leaving the agency as a result of departing and retiring personnel and within-agency promotions represents a significant challenge. NRC's Office of Human Resources continues to work with NRC offices and regions to identify and add useful information to its recently developed knowledge management website. Continuing attention is needed to explore innovative methods to capture and transfer key knowledge held by agency employees.

Monitoring of Attrition Rate

NRC monitors its voluntary attrition rate, including retirements, which has historically been below 6 percent. Close monitoring is critical because it is possible that NRC's attrition rate could increase as nuclear industry competition for skilled employees increases and as older staff members retire. As of August 30, 2006, there were approximately 3,200 NRC staff at the agency, the highest total since 1993. In spite of the accelerated hiring efforts, NRC faces the difficult challenge of replacing key senior staffers who retire or leave the agency. For example, during the first seven months of 2006, of the 19 Office of Nuclear Reactor Regulation staff who either retired or left the agency, seven were considered senior staffers. The agency's continued monitoring of the attrition rate is necessary to identify any unusual upward trends and to take prompt action to build and maintain a strong retention culture.

Related Office of the Inspector General Work

Audits

- 2005 NRC's Safety Culture and Climate Survey

CHALLENGE 9
Ability to meet the demand for licensing new reactors.

There is a growing list of United States utilities (licensees) that are considering new nuclear power plant construction in the Nation. These licensees intend to submit various applications including those for early site permits, combined licenses, and design certifications. NRC's licensing process is outlined in 10 CFR Part 52, *Early Site Permits; Standard Design Certifications; and Combined Licenses for Nuclear Power Plants* (Part 52). The Combined Operating Licenses (COLs) for nuclear power facilities involve the issuance of a combined construction permit and a conditional operating license for a nuclear power facility. NRC is involved in several significant activities to ensure that it is prepared to review the first of these COL applications which is expected in 2007-2008. Some of these activities include:

- Reviewing industry's guidelines for a COL application;
- Determining what actions are necessary to prepare for receipt of a COL application;
- Assessing rulemaking activities for the licensing process;
- Reviewing Early Site Permits applications; and
- Developing a Multi-National Design Approval program with international regulators that will take advantage of worldwide nuclear safety, licensing and operating experience.

The NRC has already certified some new reactor designs under the new Part 52 licensing process. Under this approach, NRC pre-approves or certifies new reactor designs and allows licensees' to apply for an Early Site Permit and/or a COL using one of the pre-approved designs. Also, NRC intends to apply a Design-Centered-Approach to facilitate effective, efficient, and timely review of multiple COL applications. This approach streamlines and shortens the NRC review process.

Although the Part 52 application process has advantages for both NRC and the nuclear industry, it nevertheless represents a significant challenge through the increased workload and pressure on the agency to create the infrastructure necessary to support review of new plant licensing applications.

As NRC enters a new era of reactor regulation, it faces many challenges. In addition to ongoing license renewal activities, the agency will face the first round of new reactor applications since 1978. NRC estimates that it may receive 20 or more applications in the coming years, and believes that upward of 450 new staff positions will be needed to meet this need.

Coinciding with the dramatic increase in regulatory responsibilities will be the retirement of many senior staff that has experience licensing reactors from the 1960s, 1970s, and 1980s. The agency's ability to effectively review and license the new generation of commercial nuclear reactors will depend significantly on how well employees, new to the process, are trained and developed into effective reviewers and regulators at the staff and senior management level. Furthermore, construction oversight of future plants would be equally or more challenging.

The review of new applications involving new reactor technologies, a new licensing process, and new untested staff in this realm necessitates a strong control process to ensure the agency meets its review and licensing objectives. Specific challenges include:

- Project Management – Effective technical and communications skills are essential to being the focal point (project manager) of NRC and licensee interactions.

- Construction Inspection Oversight – NRC must reinstitute this program after being dormant for many years.

- Technical Review Process – NRC must have a defined process for ensuring that all requisite technical reviews are conducted, documented and approved.

- Standard Review Plan – As with the previous generation of reactors, NRC must have a comprehensive Standard Review Plan for examining a license application. Additionally, consistent implementation is vital.

- Safety Evaluation Reports – The agency needs a solid process for compiling its regulatory examination into a Safety Evaluation Report. This report reflects the agency's conclusion about a plant's ability to operate safety. It is vital that such conclusions be documented and approved.

Finally, in a September 28, 2006, letter, Congress raised concern that, in preparing for additional COLs, NRC is presented with organizational, management and resource challenges.

CONCLUSION

Although the nine challenges identified in this report are distinct, they are also interdependent. The overarching challenge of managing human capital is the cornerstone to effectively addressing all other management and performance challenges.

One of the OIG's strategic goals is to improve the economy, efficiency, and effectiveness of NRC corporate management. The Inspector General's identification of the most serious management and performance challenges facing the agency and the OIG's commitment to ensuring the integrity of NRC programs and operations help achieve this goal. The agency continues to take action in response to the management and performance challenges identified. In particular, the agency sufficiently addressed one of the 2005 management challenges to result in its removal. However, continuing management attention and emphasis on the management and performance challenges is essential to achieving significant progress for each challenge.

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Appendix A

SCOPE AND METHODOLOGY

The scope of this evaluation involved the Inspector General's annual assessment of the most serious management and performance challenges facing the Nuclear Regulatory Commission. The challenges represent critical areas or difficult tasks that warrant high-level management attention. To accomplish this work, the Office of the Inspector General (OIG) focused on determining (1) the current challenges, (2) the agency's efforts to address the challenges, and (3) what remains to be done.

The OIG reviewed and analyzed pertinent laws and authoritative guidance. In addition, OIG conducted interviews with agency officials to identify current performance and management challenges and the steps taken by the agency to address these challenges through planning and in daily operations. Since challenges affect mission critical areas or programs that have the potential to impact agency operations or strategic goals, NRC Commission members, the EDO and CFO were afforded the opportunity to share any information on this subject

OIG conducted this evaluation from July through September 2006. The major contributors to this report were Steven Zane, Team Leader, Beth Serepca, Team Leader, Anthony Lipuma, Team Leader, Debra Lipkey, Audit Manager, and Michael Steinberg, Senior Auditor.