

September 30, 2005

MEMORANDUM TO: Chairman Diaz

FROM: Hubert T. Bell/RA/
Inspector General

SUBJECT: INSPECTOR GENERAL'S ASSESSMENT OF THE
MOST SERIOUS MANAGEMENT CHALLENGES
FACING NRC (OIG-05-A-23)

SUMMARY

On January 24, 2000, Congress enacted the *Reports Consolidation Act of 2000* (the Act), which requires Federal agencies to provide financial and performance management information in a more meaningful and useful format for the Congress, the President, and the public. Included in the Act is the requirement that, on an annual basis, the Inspector General of each Federal agency summarize what he or she considers to be the most serious management and performance challenges facing the agency and assess the agency's progress in addressing those challenges. In compliance with the Act, I am submitting my annual assessment of the most serious management challenges confronting the United States Nuclear Regulatory Commission (NRC). Also, included in this submission is a listing of Office of the Inspector General (OIG) audit and investigative reports issued during FY 2005. These reports address the challenges identified.

Congress left the determination and threshold of what constitutes a most serious management challenge to the discretion of the Inspectors General. Therefore, I applied the following definition in preparing my statement:

Serious management 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.

The most serious management challenges facing NRC may be, but are not necessarily, areas that are problematic for the agency. The challenges identified represent critical areas or difficult tasks that warrant high-level management attention. This year, I identified nine management challenges that I consider to be the most serious. These challenges are essentially the same ones identified last year, with minor title changes for challenges 3 and 4.

DISCUSSION

The most serious management challenges that follow are not ranked in any order of importance.

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,¹ source material,² and special nuclear material³) 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. The challenges currently facing NRC will be to (1) ensure that there are adequate inspections to verify

1 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 utilizing 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)]

2 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]

3 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]

licensees' commitments to their material control and accounting programs, and a reliable special nuclear materials system; and (2) establish a means to ensure the accurate accounting for radioactive materials, especially those with the greatest potential to impact public health and safety.

The NRC has proposed rulemaking for a National Source Tracking System effort to improve accountability and tracking of radioactive sources. The system is proposed as a cradle to grave tracking system of high risk sealed sources. The NRC has also worked with the Department of Energy (DOE) to facilitate recovery of selected orphaned sources. Further, NRC also issued security orders to selected material licensees requiring upgraded physical security.

NRC regulations require stringent design, testing, and monitoring in the handling and storage of spent nuclear fuel. In July 2005, NRC began site-specific spent fuel pool assessments to identify additional enhancements. Nine plant assessments were completed in July and an additional 57 assessments are scheduled for completion by the end of the calendar year.

Related Office of the Inspector General Work

Audits

- Audit of NRC's Baseline Inspection Program
- Audit of NRC's High-Level Waste Program
- Audit of NRC's Generic Communications Program
- Audit of the Decommissioning Program

Investigations

- Review of NRC Oversight of Licensee Fitness for Duty Program
- Inadequate Handling of Inspection Finding
- Adequacy of NRC Oversight of Lost Nuclear Material
- NRC's Oversight of the Hope Creek Nuclear Power Plant

CHALLENGE 2
Protection of information.

Information is an asset and must be protected. Information needing protection includes sensitive unclassified and classified information as well as computer security information.

Sensitive Unclassified and Classified Information

As a result of increased terrorist activity worldwide, NRC continues to reexamine its practice of releasing most documents to the public. NRC employees create and work on significant amounts of information that is sensitive and needs to be protected. Such information can be sensitive unclassified information or classified national security information contained in written documents and various electronic databases.

The agency has made strides in evaluating information that should be withheld from public release. There have been some instances, however, where stakeholders discovered certain documents that should have been publicly available, but instead were designated as non-publicly available. In other instances, sensitive unclassified documents including Safeguards Information (SGI) that should have been withheld were inadvertently released. In light of these occurrences, the agency needs to be particularly vigilant in determining which documents and information should be released.

NRC reviewed other areas to ensure the appropriate release of documents to the public. For example, the Sensitive Information Screening Project (SISP) has provided guidance on the handling of information that may be of benefit to terrorists and the treatment of such information. The agency also developed new guidance for handling sensitive unclassified information in the Agencywide Documents Access and Management System (ADAMS) that could potentially be useful to a terrorist. The Commission approved criteria for staff to use in performing reviews of documents to ensure that only appropriate information is publicly released.

The Executive Director for Operations (EDO) has emphasized the importance of being vigilant about documents sent via e-mail, because the implications of an inadvertent e-mail transmittal of sensitive unclassified or classified information can be enormous. The EDO reminded NRC employees that they should not send sensitive or classified documents through the e-mail system. In addition, on July 29, 2005, NRC issued a policy reminder that camera-equipped cell phones pose a security as well as a privacy concern because they enable people to covertly photograph images or scenes and transmit them instantly to the Internet.

Computer Security

Computer security is the protection afforded to an information system in order to attain the objective of preserving the integrity, availability, and confidentiality of the information system resources (including hardware, software, firmware, information/data, and telecommunications).

The Federal Information Security Management Act (FISMA) was enacted on December 17, 2002. FISMA outlines the information security management requirements which all agencies must implement and report annually to the Office of Management and Budget (OMB) and Congress on the effectiveness of their security programs. This evaluation must include testing of the effectiveness of information security policies, procedures, and practices of a representative subset of the agency's information systems. In addition to the agency review, FISMA requires an annual evaluation to be performed by the Office of the Inspector General. This year's OIG evaluation discovered weaknesses in the following security controls: certification and accreditation process, automated information system inventory process, security controls for standalone personal computers and laptops, listed systems that process safeguards and/or classified information, and weaknesses in complying with many of the OMB requirements for FISMA implementation.

Related Office of the Inspector General Work

Audits

- Audit of NRC's Drug Testing Program
- Independent Evaluation of NRC's Implementation of the Federal Information Security Management Act (FISMA) for Fiscal Year 2005
- Audit of the Reactor Program System
- Audit of NRC's Telecommunications Program
- Audit of NRC's Policy and Practices Concerning Camera Cell Phones

Investigations

- Failure to Docket Licensee Information
- Follow-up to Inadvertent Releases of SGI to Unauthorized Individuals
- Mishandling of Allegation Regarding Design Basis Information

CHALLENGE 3

Development and implementation of a risk-informed and performance-based regulatory approach.

The Chairman has stated that NRC has increased its safety focus on licensing and oversight activities through application of a balanced combination of experience, deterministic models, and probabilistic analysis. This approach is known as risk-informed and performance-based regulation. However, NRC continues to face different challenges in making its regulatory framework more risk-informed for nuclear power plants and nuclear material licensees. Incorporating risk analysis into regulatory decisions improves the regulatory process by focusing both NRC and licensee attention and activities on the areas of highest risk. The result may be reducing unnecessary burden on licensees and increasing the efficiency and effectiveness of the agency's resources.

NRC conducts inspections at the Nation's 104 nuclear power reactors licensed to operate. The NRC Reactor Inspection Program and Reactor Performance Assessment Program are combined into a single program. This combined program implements 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 comprehensive list of areas to inspect within seven established cornerstones of safety. While the baseline inspection program framework is generally sound, OIG identified opportunities for improvement. The baseline inspection program is the minimum inspection oversight that should be conducted at each nuclear power plant, but the agency lacks a mechanism to assess the overall effectiveness and quality of this critical program.

Another challenge is NRC's use of Probabilistic Risk Assessment (PRA). This challenge reflects NRC's commitment to increase the use of PRA technology in all regulatory matters to the extent supported by the state-of-the-art in PRA methods and data and in a manner that complements the agency's approach and philosophy. Implementation of this policy is expected to improve NRC's regulation of licensees.

Related Office of the Inspector General Work

Audits

- Audit of NRC's Baseline Inspection Program
- Audit of NRC's Generic Communications Program

CHALLENGE 4

Ability to modify regulatory processes to meet a changing environment.

As a result of the changing regulatory and business environment, areas of increased emphasis exist. These areas are detailed in the NRC Strategic Plan. External as well as internal demands drive the NRC towards ensuring that it is more open in its regulatory processes. This openness results in a constant balancing of long-term improvement efforts and short-term emergent issues. NRC continues to face challenges related to its ability to address increased workloads associated with reactor license renewals, new plant licensing, licensee requests to increase power levels, and high-level waste disposal.

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 power reactors to operate for up to 40 years. The Act allows the NRC to approve these licenses to be renewed for an additional 20 years. Among the nuclear power plants that have not yet had their license renewed, the first of these 40-year operating licenses will expire in 2009. Approximately 25 percent of the remaining licenses will expire by 2015. The decision whether to seek a renewal is the responsibility of the nuclear power plant owner(s). There continues to be a sustained strong interest in license renewal from utilities. To regulate this activity, NRC reviews the applicants' technical submittals and environmental application materials to verify information submitted in the renewal applications. An application for license renewal addresses technical and environmental issues.

New Plant Licensing

There is a growing list of United States utilities (licensees) that are publicly considering new plant construction in the U.S. NRC's licensing process outlined in 10 CFR Part 52 involves a review of Early Site Permits (ESP), Standard Design Certifications, and/or Combined Operating Licenses (COLs) for nuclear facilities. The COLs for nuclear power facilities involves 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, and

- Reviewing ESP applications.

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.

Also, NRC has certified reactor designs, which the agency reviews and approves for general use. Licensees' use of a pre-approved design streamlines and shortens the NRC review process, ultimately paving the way for new reactors to be built and licensed.

Licensee Requests to Increase Power Levels

Many licensees have sought NRC approval to operate their plants at a higher power level than the level authorized in the original license by submitting a request to increase reactor power output. As of April 2005, the NRC approved over 105 power uprate increases. Over the next five years, licensees anticipate requesting additional power uprates, which will affect the ability of NRC staff to maintain established review schedules.

High-Level Waste Disposal

According to the Nuclear Waste Policy Act, the DOE 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 license application review plan. DOE's plans to tender a license application to NRC for the construction of a permanent repository for high-level nuclear waste at Yucca Mountain in Nevada were delayed by a court ruling in FY 2004. The court ruling vacated the Environmental Protection Agency's (EPA) 10,000-year compliance period standard because it was not consistent with the recommendation of the National Academy of Sciences, as mandated by Congress. As a result, EPA needed to develop public health standards for the planned high-level radioactive waste disposal facility at Yucca Mountain that will protect the public health for 1 million years. EPA posted a notice of the proposed standards in the Federal Register, established a period for public comment, and will hold public hearings on the proposed rule during the comment period. NRC is revising its regulations in this area, as Congress also mandated that NRC incorporate the EPA standards in its regulations. On September 8, 2005, NRC published a Federal Register notice proposing to amend its regulations to implement EPA's proposed standards.

The revised schedule for DOE to tender a license application has not yet been established. Because a multitude of issues will need review in a congressionally mandated 3 to 4 year time frame, NRC anticipates that the administrative

proceeding to assess the repository will be an enormous undertaking. One significant challenge for NRC is ensuring that all parties to the licensing process and key decision makers have timely access to filings and exhibits involved with the licensing process.

An additional delay resulted from a ruling by an NRC Atomic Safety Licensing Board Panel that DOE improperly certified that it had met its regulatory obligation to make all of its documentary material related to Yucca Mountain electronically available via the NRC's Licensing Support Network. This ruling was a significant determination, as it is DOE's certification that starts a six-month clock for the earliest that NRC can docket DOE's Yucca Mountain license application. DOE has been working towards re-certifying that all of its documentary material related to Yucca Mountain is electronically available. As of July 2005, over 3 million documents had been loaded into the licensing support network. Recertification has not yet been rescheduled.

Given the events of FYs 2004 and 2005, the ability to modify regulatory processes to meet a changing environment will continue to be a prominent challenge for NRC in FY 2006, as it relates to NRC's high-level waste program.

Related Office of the Inspector General Work

Audits

- Audit of NRC's High-Level Waste Program
- Audit of the Reactor Program System
- Audit of NRC's Generic Communications Program

Investigation

- Adequacy of NRC's Oversight of Vermont Yankee Power Uprate

CHALLENGE 5
Implementation of information resources.

Federal agencies' acquisition and implementation of information resources are 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 (IT) 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, like other Federal agencies, 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 (LSN), the NRC Web site, and the ADAMS public reading room.

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

Project Management Methodology (PMM)

NRC is subject to several legislative mandates regarding its management of IT investments. The OMB has issued circulars that describe policies to be implemented at each agency. These policies are summarized and referenced in OMB Circular A-130, "Management of Federal Information Resources." In addition, the Clinger-Cohen Act of 1996 requires each Agency head to design and implement a Capital Planning and Investment Control process. The NRC developed PMM to address these requirements.

Homeland Security Presidential Directive 12 (HSPD-12)

On August 27, 2004, the President signed HSPD-12 requiring the development and agency implementation of a mandatory government-wide standard for secure and reliable forms of identification for Federal employees and contractors. According to HSPD-12, secure and reliable forms of identification means identification that:

- Is based on sound criteria for verifying an individual employee's identity;
- Is strongly resistant to identity fraud, tampering, counterfeiting, and terrorist exploitation;
- Uses electronic methods of rapid authentication; and
- Is issued only by providers whose reliability has been established by an official accreditation process.

The agency formed an HSPD-12 working group that includes representatives from the Office of Administration's Division of Facilities and Security/Security Branch; Planning, Budgeting, and Performance Management Team; and the Office of Information Services. This working group has been meeting on a bi-weekly basis to discuss the requirements and impact of HSPD-12 and the associated guidance publications.

NRC will have a challenge meeting the completion dates and having the resources to conduct the activities.

High-Level Waste (HLW) Meta System

NRC is developing the High-Level Waste Meta System (a system of systems) to support the agency's review and hearings pertaining to the DOE's anticipated application to build a high-level waste repository at Yucca Mountain. The HLW Meta System is the collection of interdependent software applications, procedures, and information technology needed to support NRC's business activities associated with the licensing process. For example, the system will interface with ADAMS and the licensing support network and will include an Electronic Information Exchange component to allow parties to submit, service, and access documents. It will also include the Electronic Hearing Docket, which will serve as the agency's official docket; the Digital Data Management System, which will submit exhibits and hearing transcripts to support hearing functions; and NRC's High-Level Waste Collection of records relevant to discovery. System development is expected to cost approximately \$9.5 million and NRC staff anticipates that much of the system will be certified and accredited by April 2006. The challenge for NRC will be to ensure that this important project stays on track in order to effectively support the upcoming license application review process.

Related Office of the Inspector General Work

Audits

- Independent Evaluation of NRC's Implementation of the Federal Information Security Management Act (FISMA) for Fiscal Year 2005
- Audit of the Reactor Program System
- Audit of NRC's Telecommunications Program
- Audit of NRC's Policy and Practices Concerning Camera Cell Phones

Investigation

- Theft of Cash and Credit Cards at NRC Headquarters

CHALLENGE 6

Administration of all aspects of financial management.

Sound financial management includes implementation of new internal control requirements, preparation of financial statements in accordance with applicable requirements, and efficient and effective procurement operations. A brief discussion of these areas follows.

New Internal Control Requirements

NRC's challenge is to take systematic and proactive measures to implement new OMB internal control requirements which become effective in FY 2006. The Office of the Chief Financial Officer serves as the agency lead to implement the new requirements of OMB Circular No. A-123 Revised, *Management's Responsibility for Internal Control*, December 21, 2004. This Circular provides Federal managers with guidance on improving the accountability and effectiveness of Federal programs and operations by establishing, assessing, correcting, and reporting on internal control. The Circular, among other things, emphasizes the need for integrated and coordinated internal control assessments that synchronize all internal control-related activities. It provides updated internal control standards, as well as new specific requirements for conducting management's assessment of the effectiveness of internal control over financial reporting.

Financial Statements

While NRC received an unqualified audit opinion on its FY 2004 financial statements, the audit opinion on the agency's FY 2003 financial statements was revised from unqualified to qualified due to the lack of evidential matter to support the completeness of accounts receivable and revenue. The agency's independent auditors characterized NRC's fee billing system as a material weakness.

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. Among the numerous challenges facing the Agency in these areas are:

- Hiring and training new contract personnel,
- Keeping current with the Federal Acquisition Regulation (FAR),
- Ensuring adequate competition in awarding contracts,

- Considering past-performance in awarding contracts,
- Identifying the need for contract audit services, and
- Monitoring purchase card transactions.

An additional challenge facing the agency is the need to focus efforts on compliance with the FAR time standards for closing expired contracts and prompt deobligation of excess funds, which would make those funds available for other agency priorities.

Related Office of the Inspector General Work

Audits

- Results of the Audit of the U.S. Nuclear Regulatory Commission's Financial Statements for Fiscal Years 2004 and 2003
- Independent Auditors' Report on the U.S. Nuclear Regulatory Commission's Special-Purpose Financial Statements as of September 30, 2004, and for the Year then Ended
- Independent Accountants' Report on the Application of Agreed-upon Procedures for Federal Intragovernmental Activity and Balances as of September 30, 2004
- Review of NRC's Implementation of the Federal Managers' Financial Integrity Act for Fiscal Year 2004
- Audit of the Budget Formulation Process
- Audit of NRC's Contract Closeout Process

Investigations

- Fraudulent Workers' Compensation Program Claim by NRC Employee
- Fraudulent Workers' Compensation Program Claim of Former NRC Employee
- Failure to Report Billing Errors to Independent Auditors
- Mischarging of Costs by NRC Contractor
- False Reporting of Recyclable Material by Government
- Misuse of Government Travel Card by SBCR Employee
- NRC Mischarging EPRI for Reviewing Generic Products
- Misuse of NRC Travel Card by ACRS Member
- Misuse of NRC Travel Card by OIP Employee
- Fraudulent Use of NRC Purchase Card
- False Claim of Small Business Status by NRC Licensee
- Fraudulent Use of NRC Travel Card Account Number by Persons Unknown
- Misuse of NRC Citibank Travel Card by Region I Employee

CHALLENGE 7

Communication with external stakeholders throughout NRC regulatory activities.

The NRC believes 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. Therefore, management should ensure that there are adequate ways of communicating with and obtaining information from external stakeholders that may have a significant impact on the agency achieving its goals. NRC established a strategic goal which ensures openness that expressly recognizes that the public must be informed about, and have a reasonable opportunity to participate in, the regulatory processes. Because of 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. This continues to be a challenging task.

To this end, the agency has initiated efforts to improve cooperation and also enhance public outreach with specific stakeholders. NRC's Congressional Outreach program has produced favorable results. The program was initiated in 2005 and is directed at ensuring that the Congressional District offices are informed of NRC's activities in their Districts. Information discussed in this venue is broad and can include such items as security, high-level waste, spent fuel storage, NRC organization, and programs such as reactor oversight, materials, and Agreement States.

Related Office of the Inspector General Work

Audits

- Audit of NRC's Baseline Inspection Program
- Audit of NRC's High-Level Waste Program
- Audit of NRC's Generic Communications Program
- Audit of the Reactor Program System

Investigations

- Inaccurate Information Provided by NRC to Congressman
- Mishandling of Allegation by NRR Staff

CHALLENGE 8

Intra-agency communication (up, down, and across organizational lines).

Effective intra-agency communications should occur with information flowing up, down, and across the organization. Information should be communicated to management and others within the organization who need it and in a form, and within a time frame, that enables them to carry out their responsibilities.

NRC has instituted various actions to improve its internal communications over the past year. The Director of Communications and technical communications assistants are working to continually improve this area. The agency continues to produce electronic "EDO Updates." These represent timely and succinct communications between the EDO and the entire staff. NRC's internal Web site addresses different types of employee concerns. NRC continues to hold "All Employees" meetings as a mechanism for direct two-way communication between the Commission and agency staff. Also, NRC's Strategic Plan stresses the importance of the role of internal communications in achieving the agency's mission and goals.

The Office of the Executive Director for Operations' (OEDO) internal web page provides various guidance to the staff, including guidance on communicating with the Commission, the OEDO mission and history, new and archived EDO updates, senior manager biographies, and OEDO staff contacts for various NRC program offices and topics.

The agency has made progress on the "roadmap initiative" which is intended to be a planning tool used to give the EDO's office a six month view of office and regional products, allowing early incorporation of senior management views, and reducing burden by minimizing re-writes and last minute changes in direction. To improve connectivity, Office Directors place their monthly roadmap reports in an ADAMS folder for access by other Office Directors and Regional Administrators to determine whether there are products that may require input or coordination.

Related Office of the Inspector General Work

Audits

- Audit of NRC's Baseline Inspection Program
- Audit of NRC's High-Level Waste Program
- Audit of the Budget Formulation Process

Investigation

- Failure to Report Billing Errors to Auditors

CHALLENGE 9
Managing human capital.

NRC faces current and emerging staffing challenges that could affect its ability to maintain the skills base needed to carry out the agency's mission. One of the challenges faced, along with the rest of the Federal Government, is an aging workforce. Retirement accounts for just over half of NRC's attrition, which most directly depletes the knowledge base. This makes identification of probable retirements and plans for successful replacement of those skilled individuals a high priority.

The challenge to be met by the NRC is preparing to replace an increasing number of individuals who become eligible to retire, taking with them valuable skills and institutional knowledge. However, not all individuals retire immediately upon eligibility. At NRC, on average, employees stay about four years beyond their retirement eligibility date.

NRC's workforce must possess detailed knowledge and specialized technical skills to fulfill its public health and safety mission. To maintain this expertise, NRC will need to build its human capital in the technical, financial, and administrative areas. In its Strategic Plan, NRC identified the management of human capital as a major challenge because of declining workforce numbers, loss of institutional knowledge and critical skills, and a shrinking labor pool.

NRC periodically assesses its human capital situation looking for ways to make improvements to support the achievement of its mission and goals. Agency efforts in critical skills staffing and training/development are described as follows:

Critical Skills Staffing

NRC currently uses a wide variety of human capital policies and programs for recruiting, hiring, training and development, and retention. The agency is challenged by preparing for growth in current and emerging work requirements including license renewals, applications for power uprates, potential licensing for high-level waste, and new reactor projects. These factors will require an increase in staff resource needs. Uncertainty of licensee schedules complicates the agency's efforts to have staff available with the right skills at the right time.

NRC measures the skills supply and demand using a strategic workforce planning web-based tool. The system provides a means for managers to specify their near-term and long-term skill needs and provides employees with a way to indicate their level of expertise in these skills areas. The agency completes an annual information call where managers identify continuing and newly anticipated skill gaps. Once this information is analyzed, the Office of Human Resources works with managers to plan and implement skill gap closure strategies.

Training/Development

The purpose of strategic planning for training and development is to ensure that processes, infrastructure, evaluation, and feedback methodologies are in place so that the agency's training and development activities mature and maintain the critical knowledge competencies needed to execute the agency's strategic mission. To accomplish this, the Office of Human Resources is developing a Strategic Plan for training and development, which outlines a training and development vision, mission, and strategic outcome for the agency. The focus is on alignment with agency goals and strategies and to provide for training support for staff. NRC's plan in this area outlines a number of goals, some of which include:

- Focus on optimizing resources spent to conduct high quality training to meet the needs of a diverse workforce,
- Provide and support comprehensive, integrated, competency-based programs for staff, and
- Use training resources (expertise, facilities, equipment, and analytical tools) to effectively support other agency programs, including incident response and international activities.

Related Office of the Inspector General Work

Audit

- Audit of NRC's Baseline Inspection Program

CONCLUSION

Although the nine challenges identified in this report on the last page are distinct, they are also interdependent. 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 challenges facing the agency and the OIG's commitment to ensuring the integrity of NRC programs and operations help achieve this goal. Further, as evidenced by this review, the agency continues to take steps to address the management challenges through planning and in day-to-day operations.

cc: Commissioner Merrifield
Commissioner Jaczko
Commissioner Lyons
Luis Reyes, EDO
William Dean, OEDO

**Most Serious Management Challenges
Facing the Nuclear Regulatory Commission
As of September 30, 2005
*(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** Intra-agency communication (up, down, and across organizational lines).
- Challenge 9** Managing human capital.

Distribution

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