

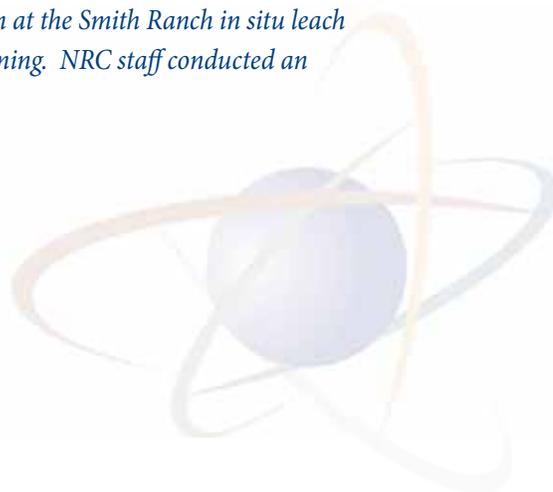
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Photo Courtesy of NRC Image Library.

NRC Region IV inspector Linda Gersey (right) surveys for gamma radiation at the Smith Ranch in situ leach uranium recovery facility, owned by Power Resources Inc., in eastern Wyoming. NRC staff conducted an unannounced inspection of the facility on September 23-25, 2008.



APPENDIX A

INSPECTOR GENERAL'S ASSESSMENT OF THE MOST SERIOUS MANAGEMENT AND PERFORMANCE CHALLENGES FACING THE NRC

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

OFFICE OF THE
INSPECTOR GENERAL

September 30, 2008

MEMORANDUM TO: Chairman Klein

FROM: 
Hubert T. Bell
Inspector General

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

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

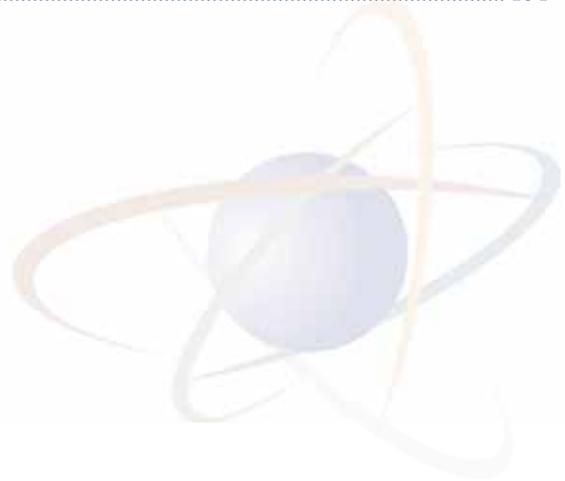
We appreciate the cooperation extended to us during this evaluation. The agency provided comments on this report, which have been incorporated as appropriate. If you have any questions or comments about this report, please feel free to contact Stephen D. Dingbaum, Assistant Inspector General for Audits,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

Attachment: As stated

cc: Commissioner Jaczko
Commissioner Lyons
Commissioner Svinicki

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EXECUTIVE SUMMARY

BACKGROUND

The Reports Consolidation Act of 2000 requires the Inspector General (IG) of each Federal agency to summarize annually what he or she considers to be the most serious management and performance challenges facing the agency and to assess the agency's progress in addressing those challenges.

PURPOSE

In accordance with the act's provisions, the Inspector General of the NRC updated what he considers to be the most serious management and performance challenges facing NRC. The IG evaluated the overall work of the Office of the Inspector General (OIG), the OIG staff's general knowledge of agency operations, and other relevant information to develop and update his list of management and performance challenges. As part of the evaluation, OIG staff sought input from NRC's Chairman, Commissioners, and management to obtain their views on what challenges the agency is facing and what efforts the agency has taken to address previously identified management and performance challenges.

RESULTS IN BRIEF

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

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

Prior challenge 2, "Appropriate handling of information," was combined with prior challenge 7, "Communication with external stakeholders throughout NRC regulatory activities." The consolidation of these challenges resulted in the following description for new challenge 2, "Managing information to balance security with openness and accountability," which captures the need for both openness and protection of information.

Prior challenge 3, "Development and implementation of a risk-informed and performance-based regulatory approach," was revised to the current challenge 3, "Implementation of a risk-informed and performance-based regulatory approach." This change reflects the relative maturity of NRC's risk-informed and performance-based regulatory programs and their advancement beyond developmental efforts to implementation activities.

Prior challenge 4, "Ability to modify regulatory processes to meet a changing environment," specifically the potential for a nuclear renaissance, was reworded to more precisely focus on licensing issues. Current challenge 4 now states, "Ability to modify regulatory processes to meet a changing environment, to include the licensing of new nuclear facilities." Waste issues, formerly covered in challenge 4, are reflected in a new challenge 5, "Oversight of radiological waste."

Prior challenge 5, "Implementation of information technology," was reworded to current challenge 6, "Implementation of information technology and information security measures," to emphasize the need to ensure that information technology resources use technological solutions for information security when appropriate.

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

MOST SERIOUS MANAGEMENT AND PERFORMANCE CHALLENGES FACING THE NUCLEAR REGULATORY COMMISSION* AS OF SEPTEMBER 30, 2008

(AS IDENTIFIED BY THE INSPECTOR GENERAL)

- Challenge 1** Protection of nuclear material used for civilian purposes.
- Challenge 2** Managing information to balance security with openness and accountability.
- Challenge 3** Implementation of a risk-informed and performance-based regulatory approach.
- Challenge 4** Ability to modify regulatory processes to meet a changing environment, to include the licensing of new nuclear facilities.
- Challenge 5** Oversight of radiological waste.
- Challenge 6** Implementation of information technology and information security measures.
- Challenge 7** Administration of all aspects of financial management.
- Challenge 8** Managing human capital.

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

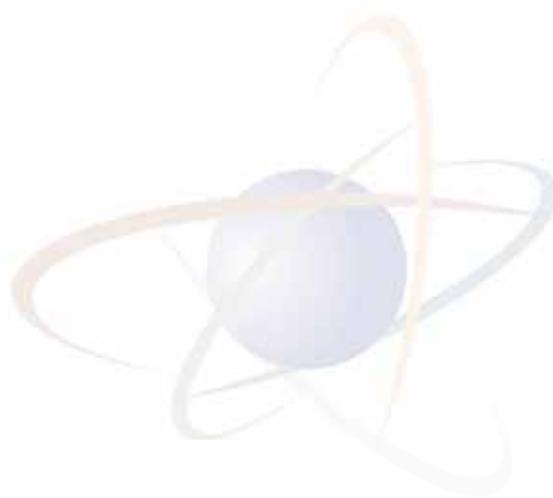
CONCLUSION

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

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

ABBREVIATIONS AND ACRONYMS

CFR	Code of Federal Regulations
COL	combined operating license
CUI	controlled unclassified information
DOE	U.S. Department of Energy
FY	fiscal year
IG	Inspector General
IT	information technology
MC&A	material control and accounting
NMSS	Office of Nuclear Material Safety and Safeguards
NMMSS	Nuclear Materials Management and Safeguards System
NRC	U.S. Nuclear Regulatory Commission
NSTS	National Source Tracking System
OIG	Office of the Inspector General
T&L	time and labor



I. BACKGROUND

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

II. PURPOSE

In accordance with the act's provisions, the NRC IG updated what he considers to be the most serious management and performance challenges facing the agency. The IG evaluated the overall work of the Office of the Inspector General (OIG), the OIG staff's general knowledge of agency operations, and other relevant information to develop and update his list of management and performance challenges.

In addition, OIG sought input from NRC's Chairman, Commissioners, and management to obtain their views on what challenges the agency is facing and what efforts the agency has taken or planned to address previously identified management and performance challenges.

III. EVALUATION RESULTS

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

DETERMINATION OF MANAGEMENT AND PERFORMANCE CHALLENGES

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

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

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

MOST SERIOUS MANAGEMENT AND PERFORMANCE CHALLENGES FACING THE NUCLEAR REGULATORY COMMISSION* AS OF SEPTEMBER 30, 2008

(AS IDENTIFIED BY THE INSPECTOR GENERAL)

- | | |
|--------------------|--|
| Challenge 1 | Protection of nuclear material used for civilian purposes. |
| Challenge 2 | Managing information to balance security with openness and accountability. |
| Challenge 3 | Implementation of a risk-informed and performance-based regulatory approach. |
| Challenge 4 | Ability to modify regulatory processes to meet a changing environment, to include the licensing of new nuclear facilities. |
| Challenge 5 | Oversight of radiological waste. |
| Challenge 6 | Implementation of information technology and information security measures. |
| Challenge 7 | Administration of all aspects of financial management. |
| Challenge 8 | Managing human capital. |

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

CHANGES TO MANAGEMENT CHALLENGES

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

CONSOLIDATION OF TWO CHALLENGES

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

NEW WORDING FOR THREE CHALLENGES

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

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

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

¹ 2007 challenge 2, "Appropriate handling of information." 2007 challenge 7, "Communication with external stakeholders throughout NRC regulatory activities."
² 2007 challenge 3, "Development and implementation of a risk-informed and performance-based regulatory approach."
³ 2007 challenge 4, "Ability to modify regulatory processes to meet a changing environment, specifically the potential for a nuclear renaissance."
⁴ 2007 challenge 5, "Implementation of information technology."

NEW CHALLENGE

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

CHALLENGE 1

Protection of nuclear material used for civilian purposes.

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

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

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

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

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

Action: NRC is enhancing its inspection program. Currently, fuel cycle MC&A inspections are

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

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

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

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

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

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

Action: NRC continues to conduct about 10 to 12 reviews per year of Agreement State radioactive materials programs under NRC's integrated materials performance evaluation program.

CHALLENGE 2

Managing information to balance security with openness and accountability.

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

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

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

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

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

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

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

Action: NRC issued multiple announcements related to the appropriate handling of information. It also completed reviews of shared network drives and office files to ensure that personally identifiable information and Privacy Act information was adequately protected or removed if unnecessary.

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

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

as risk-informed and performance-based regulation. Incorporating risk analysis into regulatory decisions is intended to improve the regulatory process by focusing both NRC and licensee attention and activities on the areas of highest risk.

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

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

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

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

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

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

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

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

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

CHALLENGE 3

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

NRC's intent is to increase its safety focus on licensing and oversight activities through the application of a balanced combination of experience, deterministic models, and probabilistic analysis. This approach is known

CHALLENGE 4

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

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

While responding to the emerging demands associated with licensing and regulating new reactors, NRC must maintain focus and effectively carry out its current regulatory responsibilities, such as inspections of the current fleet of operating nuclear reactors and fuel cycle facilities.

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

NEW FACILITIES

Issue: Instituting a Construction Inspection Program.

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

Action: NRC is taking a design-centered review approach to optimize the COL application review process. The Office of New Reactors is in the process of developing a new construction inspection program in accordance with 10 CFR 52. The new program of

“inspections, tests, analyses, and acceptance criteria” has been integrated into the 10 CFR Part 52 licensing process to create a design-specific, preapproved set of performance standards. Licensees must meet these standards and the Commission must find that the standards have been met before the licensee can load fuel and operate the plant.

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

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

EXISTING FLEET

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

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

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

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

- Issue:** Ensure the ability to identify emerging operating and safety issues at all plants, including issues associated with extended and uprated licenses; consistently apply regulatory and review changes in response to these emerging issues across the existing fleet of reactors.
- Action:** Annually, agency staff communicate the status of the power uprate program to the Commission. The staff is currently revising Inspection Procedure 71004 to provide additional guidance on inspection planning, implementation, and documentation.
- Issue:** Establish and maintain effective, stable, and predictable regulatory programs or policies for all programs.
- Action:** NRC continues to interface with stakeholders, develop regulatory policy, update rules and technical guidance, provide technical lead and management for the Reactor Oversight Process, and support the development of programmatic changes when needed.

CHALLENGE 5

Oversight of radiological waste.

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

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

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

- Issue:** Address increasing quantities of radiological waste requiring interim or permanent disposal sites.
- Action:** NRC developed and implemented a risk-informed decisionmaking framework in connection with a wide range of nuclear waste storage issues. The NRC has conducted reviews using the framework for dry cask waste storage systems and concluded that such systems provide a safe means to store spent nuclear fuel with exceedingly low risk.
- Issue:** Address issues regarding the license application to construct a high-level radioactive waste repository at Yucca Mountain, NV.
- Action:** The NRC received the Yucca Mountain license application from DOE in June 2008. Consistent with direction in the Nuclear Waste Policy Act and the Energy Policy Act, the agency has been conducting high-level waste precicensing activities to ensure appropriate standards and regulatory guidance are in place. Additionally, NRC is interacting with the applicant, the DOE, such that the licensing review for a potential Yucca Mountain high-level waste repository can be conducted in 3 to 4 years as directed by Congress. NRC is also preparing to publish a final revision to 10 CFR Part 63 to align agency regulations to new U.S. Environmental Protection Agency standards for radiation protection at a high-level waste repository.
- Issue:** Oversight of low-level waste disposal, including low-level radioactive waste disposal sites.
- Action:** NRC has informed fuel cycle and materials licensees about the potential need to store some low-level radioactive waste onsite for an extended period after the low-level waste disposal facility in Barnwell, SC, closed. NRC-updated guidance advises licensees to consider ways to minimize production of Class B and C low-level waste.
- Issue:** Oversight of nuclear waste issues associated with the decommissioning and cleanup of nuclear reactor sites and other facilities.

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

CHALLENGE 6

Implementation of information technology and information security measures.

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

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

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

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

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

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

Issue: Ensure that information systems are protected.

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

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

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

CHALLENGE 7

Administration of all aspects of financial management.

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

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

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

Action: In June 2008, the Chairman approved the Financial Accounting and Integrated Management Information System Implementation project. The new system, which will replace five aging financial systems⁵ with a single integrated core financial system, is expected to be operational in October 2010.

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

Action: NRC plans to implement the upgrade to the Time and Labor (T&L) System during the second half

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

of FY 2009. The upgrade will provide a modern, Web-enabled version of the existing PeopleSoft T&L software. The system will include electronic approval of time, as well as other forms associated with leave, overtime, and compensatory time.

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

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

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

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

CHALLENGE 8

Managing human capital.

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

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

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

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

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

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

Action: In November 2007, the Office of Administration

hired two additional personnel security specialists for the adjudication of personnel security cases. Three additional personnel security specialists were brought on board during the summer of 2008.

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

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

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

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

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

⁶ As of August 30, 2008, there were approximately 3,791 NRC staff.

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

Action: NRC is implementing knowledge management strategies⁷ that include mentoring, early replacement hiring, and rehiring annuitants with or without use of a pension offset as applicable.⁸ The agency also developed a knowledge management Web site, expressly for the purpose of retaining knowledge before key employees are promoted or retire.

IV. CONCLUSION

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

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

SCOPE AND METHODOLOGY

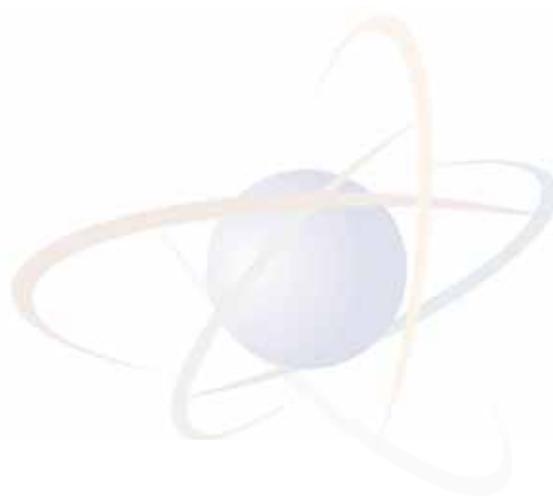
This evaluation focused on the IG's annual assessment of the most serious management and performance challenges facing the NRC. The challenges represent critical areas or difficult tasks that warrant high-level management attention. To accomplish this work, OIG focused on determining (1) current challenges, (2) the agency's efforts to address the challenges during FY 2008, and (3) future agency efforts to address the challenges.

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

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

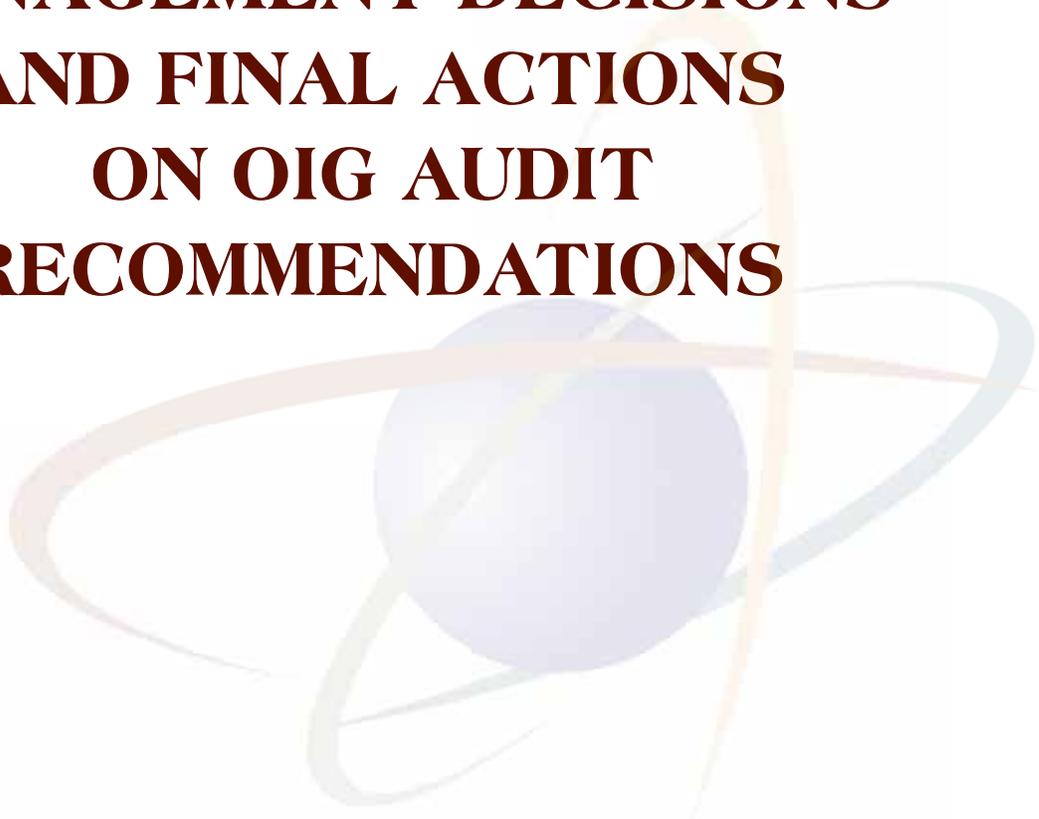
⁷ Knowledge management involves capturing critical information and making the right information available to the right people at the right time to assure that knowledge and experience of the current staff is passed on to the next generation of NRC staff.

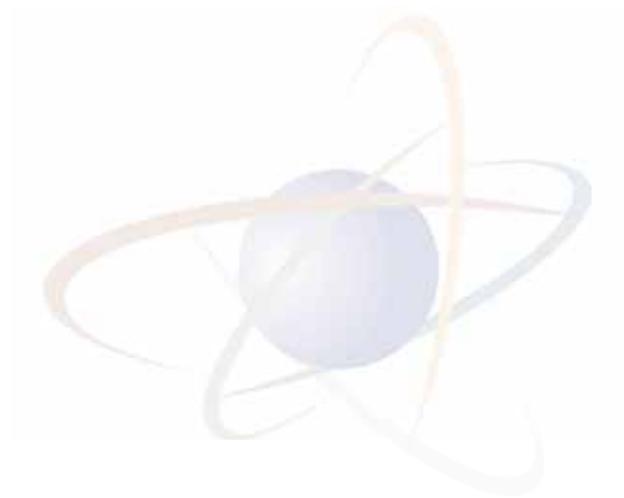
⁸ This flexibility allows NRC to rehire a retiree to fill a position at full pay if the agency has experienced difficulty in filling a position, or if a temporary emergency exists.



APPENDIX B

**MANAGEMENT DECISIONS
AND FINAL ACTIONS
ON OIG AUDIT
RECOMMENDATIONS**





The U.S. Nuclear Regulatory Commission (NRC) maintains an excellent record in resolving and implementing NRC Office of the Inspector General's (OIG) audit recommendations. Section 5(b) of the Inspector General Act of 1978, as amended, requires agencies to report on final actions taken on OIG audit recommendations. The following table gives the dollar value of disallowed costs determined through contract audits conducted by the Defense Contract Audit Agency and NRC's OIG. Because of the sensitivity of contractual negotiations, the agency will not provide details of these contract audits in this report. As of September 30, 2008, there were no outstanding audits recommending that funds be put to better use.

**MANAGEMENT REPORT ON OFFICE OF THE INSPECTOR GENERAL AUDITS
WITH DISALLOWED COSTS**

For the period October 1, 2007–September 30, 2008

Category	Number of Audit Reports	Questioned Costs	Unsupported Costs
1. Audit reports with management decisions on which final action had not been taken at the beginning of this reporting period.	0	\$0	\$0
2. Audit reports on which management decisions were made during this period.	1	\$193,585	\$0
3. Audit reports on which final action was taken during this report period.			
(i) Disallowed costs that were recovered by management through collection, offset, property in lieu of cash, or otherwise.	0	\$0	\$0
(ii) Disallowed costs that were written off by management.	0	\$0	\$0
4. Reports for which no final action had been taken by the end of the reporting period.	1	\$193,585	\$0

MANAGEMENT DECISIONS NOT IMPLEMENTED WITHIN 1 YEAR

For the OIG audit reports listed in the following tables, the NRC made management decisions before October 1, 2007. As of September 30, 2008, NRC had not taken final action, including OIG final review and closure, on some issues. Completion of the activities listed in the column “Actions Pending” will complete agency action on the listed OIG audit and evaluation recommendations.

GOVERNMENT PERFORMANCE AND RESULTS ACT: REVIEW OF THE FY 1999 PERFORMANCE REPORT (OIG-01-A-03)

February 23, 2001

The OIG conducted this audit at the request of the chairman of the Senate Committee on Governmental Affairs to determine if NRC’s FY 1999 performance data were valid and reliable and if the FY 2000 performance data would be more valid and reliable. The audit found that while NRC was improving and strengthening its performance reporting process, as interim policy guidance, the agency needed to institute management control procedures to produce valid and reliable data. The agency should then institutionalize the procedures in an NRC management directive (MD).

Open Recommendations	Actions Pending
<p>1. Develop an NRC management directive (MD) to provide the management controls needed to ensure that the NRC produces credible Government Performance and Results Act (GPRA) documents.</p>	<p>The NRC issued interim guidance for performance management and reporting performance information in July 2001, consistent with GPRA requirements. In July 2002, the NRC issued a new MD and Handbook 4.8, “Performance Measurements,” for intraagency review and comment. Staff subsequently decided that the agency should address performance measurement in the broader context of budget and performance integration. Therefore, the NRC decided to incorporate MD 4.8 into a revision of MD and Handbook 4.7, which will be titled “Planning, Budgeting, and Performance Management.” Revised MD 4.7 and Handbook will clarify the roles and responsibilities in setting the agency’s strategic direction, determining planned activities and resources, measuring and monitoring performance, and assessing performance.</p>
<p>3. Include guidance on reporting unmet goals in both the management directive and the interim policy guidance on implementing GPRA initiatives.</p>	<p>In August 2007, the Commission directed the Chief Financial Officer, in coordination with staff, to provide options for improving the agency’s budget formulation process. Staff developed and implemented a new top-down budget process in formulating the agency’s FY 2010 budget.</p> <p>Since a major section of MD and Handbook 4.7 addresses roles and responsibilities in the agency’s budget formulation process, staff pushed back the update of MD and Handbook 4.7 to factor in lessons learned from the FY 2010 budget process. In late FY 2008, staff is considering lessons learned as part of an NRC task force that is reviewing the agency’s budget formulation process and budget structure.</p> <p>Based on the task force’s current schedule for issuing guidance on the agency’s budget formulation process, staff expects to publish the MD and Handbook 4.7 in June 2009.</p>

**REVIEW OF NRC’S HANDLING AND MARKING OF SENSITIVE UNCLASSIFIED INFORMATION
(OIG-03-A-01)**

October 16, 2002

This OIG conducted this audit to assess NRC’s program for handling, marking, and protecting of official use only (OUO) information, a category of sensitive unclassified information. The audit found that NRC’s program and guidance for the handling and marking of sensitive unclassified information may not adequately protect OUO information from inadvertent public disclosure. The audit also found and that the agency does provide training on a regular basis to all NRC employees and contractors on handling and protecting sensitive unclassified information.

Open Recommendations	Actions Pending
1. Update the guidance for OUO documents to require clear identification of sensitive unclassified information to prevent its inadvertent disclosure.	Agency corrective actions require issuance of a revised management directive (MD) covering sensitive unclassified, nonsafeguards information (SUNSI) and a new MD covering safeguards information (SGI). The NRC issued MD 12.7, “NRC Safeguards Information Security Program,” on SGI on June 25, 2008. The revision of SUNSI is on hold pending the issuance of standard Federal guidance on Controlled Unclassified Information (CUI) by the National Archives and Records Administration, which is the executive agent for implementing the CUI policy. NRC will revise SUNSI policy to align it with the CUI guidance. Updated guidance is currently due on October 31, 2009.
2. Mandate consistent use of defined markings on documents containing OUO information and clarify the markings that should be used on sensitive unclassified information.	

AUDIT OF NRC’S REGULATORY OVERSIGHT OF SPECIAL NUCLEAR MATERIALS (OIG-03-A-15)

May 23, 2003

The OIG conducted this audit to determine whether NRC adequately ensures that its licensees control and account for special nuclear material (SNM). The audit found that NRC’s current levels of oversight of licensees’ material control and accounting (MC&A) activities do not provide adequate assurance that all licensees properly control and account for SNM. The audit reported that NRC performs only limited inspections of licensees’ MC&A activities and thus cannot assure the reliability of data in the Nuclear Materials Management and Safeguards System. The U.S. Department of Energy manages this computer database and shares it with the NRC as the national system for tracking certain private- and Government-owned nuclear materials.

Open Recommendations	Actions Pending
1. Conduct periodic inspections to verify that material licensees comply with MC&A requirements, including but not limited to visual inspections of licensees’ SNM inventories and validation of report information.	NRC expects to issue a proposed rule in late 2009, with issuance of the final rule by December 2010. The final rule will enhance MC&A regulations, inspections, and the licensing process. The work on the rulemaking will include documentation of the technical basis for risk-informing the MC&A program and how the rulemaking will be applied to the program. By July 2011, NRC expects to have completed the application of risk-informing the MC&A program. The agency will determine inspection resources and frequencies for all types of materials licensees’ MC&A inspections for SNM.
3. Document the basis of the approach used to risk-inform NRC’s oversight of MC&A activities for all types of materials licensees.	

AUDIT OF NRC'S INCIDENT RESPONSE PROGRAM (OIG-04-A-20)

September 16, 2004

The OIG conducted this audit to determine whether the NRC performs its incident response program in a timely and effective manner, provides adequate support to licensees, and maintains readiness and qualifications of staff. The audit found that while NRC has improved its program since the Three Mile Island 2 accident on March 29, 1979, the agency needs to do more to ensure that the program is performed consistently, is more fully understood by licensees, and maintains a well-defined process for demonstrating staff are qualified and ready to respond.

Open Recommendations	Actions Pending
4. Periodically review regional incident response programs to ensure NRC's incident response program is carried out consistently across the agency.	To implement the Incident Response Self-Assessment Program, the agency began by developing a self-assessment plan that was tested in NRC Region II. In April 2008, the agency performed a self-assessment in Region I. Another self-assessment was completed for Region IV in October 2008. By July 2009, the NRC plans to institute self-assessments in all of the NRC regions.

INDEPENDENT EVALUATION OF NRC'S IMPLEMENTATION OF THE FEDERAL INFORMATION SECURITY MANAGEMENT ACT FOR FY 2004 (OIG-04-A-22)

September 30, 2004

This was an independent evaluation of NRC's implementation of the Federal Information Security Management Act for FY 2004. The review found that while NRC had made improvements to its automated information security program, the agency still needs to make additional improvements.

Open Recommendations	Actions Pending
Two of the original 16 recommendations remain open.	Due to the sensitive nature of the OIG's review and recommendations in this area, the agency will not include specific details in this report. As of September 30, 2008, completion of agency actions on this OIG audit report requires recertification and reaccreditation of some systems and updating of a business continuity plan. The NRC is completing these actions in accordance with a prioritization of information technology security activities, based on a mission perspective and security risk. Consequently, most of these activities were completed in the first half of FY 2008, but completion of the recertification and reaccreditation of the telecommunication system will be delayed until early FY 2009. Staff will track these agency plans to completion through NRC's FY 2008 Plan of Action and Milestones required by the Federal Information Security Management Act.

SYSTEM EVALUATION OF THE GENERAL LICENSE TRACKING SYSTEM (OIG-04-A-24)

September 30, 2004

The OIG conducted this evaluation as part of the OIG’s review of NRC’s implementation of the Federal Information Security Management Act for FY 2004. The objective was to review and evaluate the managerial, operational, and technical controls for the General License Tracking System (GLTS). The GLTS facilitates the tracking and accountability of NRC general licensees and generally licensed devices. The review found that the GLTS’s security documentation did not always follow required guidelines, that security protection requirements were not consistent within the security documentation, and that NRC was not tracking all action items resulting from testing the system’s security controls.

Open Recommendations	Actions Pending
<p>1. Update the GLTS Security Plan to describe all controls currently in place. In-place controls are those marked at least at Level 3 in the self-assessment and that were documented as “passed” in the last Security Test and Evaluation Report, or in any test and evaluation on controls added since publication of that report.</p>	<p>As of September 30, 2008, the agency has completed all documents required for the GLTS certification and accreditation (C&A) effort. The newly revised GLTS system security plan describes all controls, currently in place, inherited from the General Support System on which it resides and planned controls. GLTS has been through the security test and evaluation (ST&E). The ST&E report has been received and reviewed. Staff will compile the C&A documentation, place it into ADAMS, and formally submit it to the designated approval authority for approval through the Computer Security Office for authority-to-operate.</p>
<p>3. Update the GLTS Business Continuity Plan.</p>	<p>The agency updated the GLTS contingency (business continuity) plan in May 2008. The agency tested the GLTS contingency plan and reported results to the Computer Security Office on June 10, 2008.</p>
<p>4. Update the GLTS Security Plan and GLTS self-assessment to consistently define the protection requirements (confidentiality, integrity, and availability).</p>	<p>During development of the updated GLTS System Security Plan (SSP), the NRC advised the contractor of the need to ensure consistency in defining the protection requirements and controls. With completion of the revised SSP and security test and evaluation, the annual security self-assessment was not required for FY 2008. However, during the next 3-year cycle before the agency reevaluates the SSP, the annual security self-assessments will be required and FSME will ensure that controls and protection requirements continue to be consistently defined. The security categorization prepared for the current C&A effort determined that GLTS is a major application, with a moderate security categorization for each protection objective (confidentiality, integrity, and availability).</p>

SYSTEM EVALUATION OF THE INTEGRATED PERSONNEL SECURITY SYSTEM (OIG-05-A-08)

January 14, 2005

The OIG conducted this evaluation as part of its review of NRC's implementation of the Federal Information Security Management Act for FY 2004. The objective was to review and evaluate the management, operational, and technical controls for the Integrated Personnel Security System (IPSS), which replaced NRC employee security information contained in paper files and in a less-capable automated data system. The review found that the IPSS's security test and evaluation were not comprehensive and independent, security documentation was not always consistent with National Institute of Standards and Technology (NIST) guidelines, and security protection requirements were not consistent within the security documentation.

Open Recommendations	Actions Pending
1. Recertify and reaccredit IPSS based on an independent, comprehensive, and fully documented assessment of all management, operational, and technical controls.	The agency has established completion dates in order to integrate the certification and accreditation of IPSS with the implementation of Homeland Security Presidential Directive 12 and to allow time for resolution of operational issues. Therefore, staff expects certification and accreditation of IPSS to be completed by March 31, 2009.
2. Update the IPSS Risk Assessment Report to include listed changes.	NRC staff expects to update the IPSS Risk Assessment Report to include the specified items by December 31, 2008.
3. Update the IPSS System Security Plan to include listed changes.	NRC staff expects to update the IPSS Security Plan to include the specified items by December 31, 2008.
4. Update the IPSS System Security Plan to include a section on planning for security in the life cycle and a section on incident response capability.	NRC staff expects to update the IPSS Security Plan by December 31, 2008. It will include sections on planning for security in the life cycle and incident response capability.
5. Update the IPSS System Security Plan to describe all controls currently in place. In-place controls are those marked at least at Level 3 in the self-assessment and that were documented as passed in the last Security Test and Evaluation Report (or in any test and evaluation on controls added since publication of that report.)	The agency expects to update the IPSS Security Plan by December 31, 2008, and will describe all controls currently in place.
8. Update the IPSS System Security Plan and IPSS self-assessment to consistently define the protection requirements (confidentiality, integrity, and availability).	The agency expects to update the security plan and IPSS self-assessment by December 31, 2008, to consistently define protection requirements.

AUDIT OF NRC'S BUDGET FORMULATION PROCESS (OIG-05-A-09)

January 31, 2005

The OIG conducted the audit to determine whether the budget formulation portion of the NRC's Planning, Budgeting, and Performance Management process is effectively used to develop and collect data to align resources with strategic goals and is efficiently and effectively coordinated with program and support offices. The audit found that NRC effectively develops and collects data to align resources with strategic goals, prepares the budget in alignment with the Strategic Plan, and successfully conducts Office of Management and Budget-required program assessment rating tool evaluations. The audit also found the agency needed additional internal coordination and communication efforts.

Open Recommendations	Actions Pending
1. Clarify the roles and responsibilities of the Chief Financial Officer and the Executive Director for Operations in the budget formulation process.	A revision of MD and Handbook 4.7, "Planning, Budgeting, and Performance Management," will clarify roles and responsibilities and document the budget formulation process, including decisionmaking, and will provide for a logical, comprehensive sequencing of events for obtaining early Commission direction and approval.
2. Document the decisionmaking process and the roles and responsibilities of the program review committee.	In August 2007, the Commission directed the Chief Financial Officer, in coordination with staff, to provide options for improving the agency's budget formulation process. Staff developed and implemented a new top-down budget process in formulating the agency's FY 2010 budget.
3. Document the budget formulation process to ensure a logical, comprehensive sequencing of events that provides for obtaining early Commission direction and approval.	Since a major section of MD and Handbook 4.7 addresses roles and responsibilities in the agency's budget formulation process, the agency decided that the update of the MD and Handbook 4.7 should be pushed back to factor in lessons learned from the FY 2010 budget process. In late FY 2008, NRC staff were considering lessons learned as part of an NRC task force that is reviewing the agency's budget formulation process and budget structure. Based on the task force's current schedule for issuing guidance on the agency's budget formulation process, the agency expects to publish the MD and Handbook 4.7 in June 2009. (MD and Handbook 4.7 will also address the decisionmaking roles and responsibilities of the program review committee.)

AUDIT OF NRC'S TELECOMMUNICATIONS PROGRAM (OIG-05-A-13)

June 7, 2005

The OIG conducted this audit to evaluate controls over the use of NRC telecommunications services and the physical security of NRC telecommunications systems. The OIG found that the agency needs to strengthen controls over the use of telecommunications services and the physical security of NRC telecommunications systems.

Open Recommendation	Action Pending
3. Revise Management Directive and MD Handbook 2.3 "Telecommunications" to include effective management controls over NRC headquarters staff use of agency telecommunications services.	The revised management directive and handbook is in final concurrence for publication by February 27, 2009.

AUDIT OF NRC'S DECOMMISSIONING PROGRAM (OIG-05-A-17)

September 21, 2005

The OIG conducted this audit to determine whether NRC's decommissioning program achieves desired performance results as stated in the Strategic Plan and reported in the Performance and Accountability Report. The audit found that while NRC's decommissioning program has processes in place to monitor, evaluate, and report on performance, some performance results could not be verified. In addition, although staff implemented most of the recommendations from an FY 2003 self-evaluation of the program, the agency had not made progress on a few recommendations.

Open Recommendation	Action Pending
1. Clarify and disseminate expectations for generating and maintaining supporting documentation for performance data to staff responsible for preparing and collecting performance data.	<p>Revised Management Directive 4.7, "Planning, Budgeting, and Performance Management," will include clarifications of expectations for generating and maintaining supporting documentation for performance data.</p> <p>In August 2007, the Commission directed the Chief Financial Officer, in coordination with staff, to provide options for improving the agency's budget formulation process. The agency developed and implemented a new top-down budget process in formulating the FY 2010 budget.</p> <p>Since a major section of MD and Handbook 4.7 addresses roles and responsibilities in the agency's budget formulation process, staff decided to postpone update of MD and Handbook 4.7 to include a lessons learned from the FY 2010 budget process. In late FY 2008, lessons learned were being considered by an NRC task force that is reviewing the agency's budget formulation process and budget structure.</p> <p>Based on the task force's current schedule for issuing guidance on the agency's budget formulation process, staff expects to publish MD and Handbook 4.7 in June 2009.</p>

SYSTEM EVALUATION OF SECURITY CONTROLS FOR STANDALONE PERSONAL COMPUTERS AND LAPTOPS (OIG-05-A-18)

September 22, 2005

The OIG conducted this evaluation as part of their review of NRC's implementation of the Federal Information Security Management Act for FY 2005, with the objectives of evaluating the effectiveness of NRC security policies, procedures, practices, and controls for standalone personal computers (PCs) and laptop computers. The review found that security controls for standalone PCs and laptops were not adequate, that the devices were not monitored for compliance with Federal regulations, and agency information technology coordinators' understanding of disposal practices for these devices were not consistent.

Open Recommendations	Actions Pending
2. Develop and require users to sign a rules-of-behavior agreement accepting responsibility for implementing security controls on standalone PCs and laptops.	The agency has developed standard rules of behavior that the Office of Human Resources and the National Treasury Employees Union (NTEU) have been reviewing since the beginning of May 2008. Upon completion of the review, the NRC will implement new rules. The agency will require all NRC system users to sign the rules annually. Staff will make rules available by the first quarter of fiscal year 2009.
3. Develop and implement procedures for verifying all required security controls are implemented on standalone PCs and laptops.	The Computer Security Office (CSO) is finalizing procedures for verifying security controls for standalone PCs and laptops and expects to have them completed in the first quarter of fiscal year 2009.
4. Provide users with guidance on compliance with Executive Order (EO) 13103, "Computer Software Piracy," for standalone PCs and laptops.	The agency will develop and disseminate clear guidance on compliance with EO 13103 for standalone PCs and laptops as part of the standard rules of behavior as discussed above under Recommendation 2. The agency will develop the rules of behavior, including review by the National Treasury Employees Union, by the end of FY 2009.
5. Develop and require users to sign a rules-of-behavior agreement acknowledging their compliance with EO 13103, "Computer Software Piracy," for standalone PCs and laptops.	As part of the development of the standard rules of behavior as discussed above under Recommendation 2 and Recommendation 4, a standard rules-of-behavior agreement for users to acknowledge their compliance with EO 13103 for standalone PCs and laptops will be developed, and offices will be notified of the requirement for all users of such devices to sign the agreement as a condition of using the devices. The agency will develop the rules of behavior, including review by the National Treasury Employees Union, by the end of FY 2009.
6. Develop and implement procedures for monitoring compliance with EO 13103, "Computer Software Piracy," for standalone PCs and laptops.	Procedures for monitoring compliance with EO 13103 for standalone PCs and laptops will be developed and issued as part of the standard rules of behavior as discussed above under Recommendation 2. The agency will develop the rules of behavior, including review by the National Treasury Employees Union, by the end of FY 2009.

NRC's GENERIC COMMUNICATIONS PROGRAM (OIG-05-A-19)

September 30, 2005

The OIG conducted this audit to assess the effectiveness of the Generic Communications Program, specifically whether NRC generic communications are issued in accordance with the Generic Communications Program and other regulatory requirements, and how NRC tracks licensee actions on generic communications. The audit found that NRC has an established framework for developing and issuing certain generic communications, but that weaknesses exist in NRC's internal controls over generic communications in controls for oversight of licensee actions.

Open Recommendations	Actions Pending
1. Include safeguards advisories, as well as any other agency communication tool that meets the definition of a generic communication, in the formal Generic Communications Program to ensure compliance with regulatory requirements.	Proposed new Management Directive (MD) 8.18, "NRC Generic Communications Program," defines the scope of NRC's generic communications, defines organizational roles and responsibilities for each generic communications product, and establishes security advisories and information assessment team advisories as additional agency generic communications products. The MD is in final concurrence. The agency expects to issue it in FY 2009.
3. Implement controls to ensure a systematic, consistent tracking methodology from initiation to closure for each agency-issued generic communication.	In June 2006, NRC established an interoffice working group to evaluate the current process for initiating, developing, tracking, and distributing generic communications, and to recommend process changes. The working group decided to incorporate the tracking system into the project tracking NRO requests for additional information (licensee responses and inquiries). The agency has completed final acceptance testing of the generic communication tracking system. The agency expects to implement the system in FY 2009.
4. Direct the development of a methodology that will allow the staff to gauge the effectiveness of agency-issued generic communications.	Proposed new MD 8.18, "NRC Generic Communications Program," defines the scope of NRC's generic communications and defines organizational roles and responsibilities for each generic communications product, including the conduct of effectiveness reviews. In addition, it clearly identifies those generic communications that require effectiveness reviews. The MD is in final concurrence. The agency expects to issue it in FY 2009.



AUDIT OF NRC'S OFFICE OF NUCLEAR SECURITY AND INCIDENT RESPONSE (OIG-06-A-09)

February 16, 2006

This audit was an independent evaluation of the operations of the Office of Nuclear Security and Incident Response (NSIR), formed in April 2002, specifically focusing on NSIR's management of emergent work, communications with stakeholders, and implementation of the recommendations from the organizational assessment performed in 2003. The audit found that while NSIR accomplished a great deal since its inception, it needed to focus on refining and formalizing its day-to-day operations to improve its ability to meet its mission.

Open Recommendations	Actions Pending
2. Review the Emergent Work Process to ensure emergent work is accurately documented to assist with workforce and budget decisions.	NSIR is integrating this system into its work planning management system. The Electronic Document and Action Tracking System (EDATS) will track emergent and unbudgeted work. This recommendation will be completed when the NRC fully implements EDATS throughout the agency.

AUDIT OF THE BYPRODUCT MATERIALS LICENSE APPLICATION & REVIEW PROCESS (OIG-06-A-11)

March 10, 2006

As part of a larger effort to determine whether NRC's oversight of byproduct material provides reasonable assurance that licensees account for and control the materials, the OIG directed this audit towards determining if NRC ensures, through its license application and review process, that only legitimate entities receive NRC byproduct material licenses. It concluded that because NRC has not conducted vulnerability assessments of all aspects of the materials program, there may be vulnerabilities in the license application and review process that could be exploited by individuals with malevolent intent.

Open Recommendations	Actions Pending
1. Conduct a complete vulnerability assessment of the materials program, including the license application and review process, and the methods used by licensees to purchase byproduct material from sellers.	In September 2007, the Commission approved a comprehensive plan to address needed changes in NRC's process for issuing licenses for radioactive sources. The plan called for an independent, external review panel to identify potential weaknesses or security gaps in the NRC's materials licensing program. The plan also called for the establishment of a materials program working group to provide recommendations to address any identified security gaps or weaknesses. The independent panel issued its report and recommendations on the NRC's materials licensing program in March 2008. Staff has incorporated the panel's recommendations into the overall corrective action plan for the materials licensing program. The materials program working group expects to issue its report in October 2008.
	<i>continued</i>

AUDIT OF THE BYPRODUCT MATERIALS LICENSE APPLICATION & REVIEW PROCESS (OIG-06-A-11)

continued

Open Recommendations	Actions Pending
2. Modify the license application and review process to mitigate the risks identified in the vulnerability assessment.	Staff issued revised prelicensing guidance in September 2008, to directly address the vulnerability demonstrated by the U.S. Government Accountability Office's covert investigation of the NRC's materials licensing process. As noted in action pending above, two additional groups, an independent external review panel and a materials working group, have made recommendations to enhance the NRC's materials licensing program. The agency has incorporated some of these recommendations into an overall corrective action plan for the materials licensing program. The agency is still evaluating other solutions.

NRC'S BASELINE SECURITY AND SAFEGUARDS INSPECTION PROGRAM (OIG-06-A-21)

September 8, 2006

The audit of NRC's drug testing program found that the NRC's Drug-Free Workplace Plan was not in compliance with Federal guidance that requires the plan to receive U.S. Department of Health and Human Services's (HHS's) approval and that it was missing a required clause.

Open Recommendations	Actions Pending
1. Provide the required initial and refresher security training courses for regional security inspectors at the frequency needed to support qualification requirements.	<p>Phase 1 of NRC's corrective actions is to develop foundation security courses such as "Security Fundamentals" and "Reactor Technology for Security." The Security Fundamentals course is under review with expected delivery in FY 2008. Both courses have been reviewed and delivered.</p> <p>A pilot for the "Reactor Technology for Security" course was completed in June 2007 and is under review based on comments received from course participants and lessons learned. The expected delivery was in FY 2008. The course has been reviewed and delivered. Complete.</p> <p>A 3-day annual security refresher course for security inspectors from all four NRC regions was conducted in November 2006, and was scheduled for November 13–15, 2007. Complete.</p> <p>This course is now listed in the NRC course catalog. Phase 2 of NRC's corrective action is to develop four modules of advanced security field courses. These are being reviewed, and NRC is pursuing contracts with outside Federal agencies to provide portions of this specialized training. The agency expects Phase 2 courses to be available by FY 2009. All Phase 2 courses have been developed and are scheduled in FY 2009.</p> <p><i>continued</i></p>

NRC's BASELINE SECURITY AND SAFEGUARDS INSPECTION PROGRAM (OIG-06-A-21) *continued*

Open Recommendations	Actions Pending
4. Update the security inspector training program to ensure course material is current and relevant.	Staff are developing revisions of the training requirements in NRC Manual Chapter (MC) 1245, Appendix C4, "Safeguards Inspector Technical Proficiency Training and Qualification Journal," and Office of Nuclear Security and Incident Response Office Procedure ADM-109, "Training Development and Qualification Programs." The agency expects to issue these materials in FY 2009. As the agency finalizes and publishes the courses in response to Recommendation 1 in the NRC Training Catalog, staff will also update MC 1245 and ADM-109. The agency continues to develop revisions. Staff anticipates completing action in FY 2009.
6. Include guidance in the baseline security and safeguards inspection procedures to ensure inspectors review an adequate number of sample items to assess the effectiveness of the licensee's security program.	As a result of the inspection program assessment process, and on the basis of recommendations received from the IG Audit conducted in 2006, the agency has revised security baseline inspection procedures. The revision effort, which included standardizing the inspection procedure sample sizes, was completed on October 6, 2008. The NRR inspection manual chapter coordinator possesses these procedures, and they are in the change management and declaration process with a projected publication date of mid-November 2008. The program implementation schedule is for January, 1 2009 (to coincide with the beginning of the calendar year inspection cycle).
7. Implement training on how to select an adequate number of sample items.	Along with the effort to revise the security baseline inspection procedures, NSIR provided training and familiarization on the standardization and determination of sample sizes through presentation and open discussion during the annual counterpart conference in November 2007. The agency provided further familiarization by allowing the inspectors to continue to review the revised procedures prior to finalization and implementation.

AUDIT OF THE NRC'S PROCESS FOR RELEASING COMMISSION DECISION DOCUMENTS (OIG-06-A-22)

September 8, 2006

This audit assessed the NRC's process for evaluating SECY papers and staff requirements memoranda for public release pursuant to relevant legal and regulatory requirements. The audit concluded that while the NRC has a process for handling Freedom of Information Act (FOIA) requests, there are weaknesses in the internal controls needed to ensure full compliance with the FOIA.

Open Recommendations	Actions Pending
1. Develop a program to ensure NRC compliance with the FOIA's automatic disclosure requirements.	The Commission has modified procedures; however, closure of this recommendation requires the revision of Management Directive (MD) 3.4, "Release of Information to the Public," to address document screening for compliance with Title 5 of the United States Code, 5 U.S.C. 552 (a)(1) and (a)(2). The Commission expects to issue revised MD 3.4 by December 31, 2008.

EVALUATION OF THE NRC'S USE OF PROBABILISTIC RISK ASSESSMENT IN REGULATING THE COMMERCIAL NUCLEAR POWER INDUSTRY (OIG-06-A-24)

September 29, 2006

This evaluation determined if the NRC follows prevailing good practices in probabilistic risk assessment (PRA) methods and data in its use of PRA, uses prevailing good practices in PRA methods and uses data appropriately in its regulation of nuclear power plant licensees, and achieves the objectives of the PRA policy statement. The evaluation concluded that although the NRC employs prevailing good practices in the regulation of nuclear power plants, the NRC lacks formal, documented processes and associated configuration control for PRA computer models and software.

Open Recommendations	Actions Pending
<p>3. Conduct a full verification and validation (V&V) of the Systems Analysis Program for Hands-On Integrated Reliability Evaluations (SAPHIRE) Version 7.2 and the Graphical Evaluation Module (GEM). (SAPHIRE and GEM are software programs used to perform evaluations of SPAR models and to provide risk results based on the events or initiators evaluated.)</p>	<p>Because development of SAPHIRE Version 8 is in progress, a full V&V of SAPHIRE Version 7.2 would not be an effective use of resources. Therefore, the release of SAPHIRE, Version 8, for general use by April 2010 will close this recommendation, allowing sufficient time to complete independent V&V activities.</p>

AUDIT OF THE NRC'S TECHNICAL TRAINING CENTER (OIG-07-A-05)

January 9, 2007

This audit identified opportunities to improve the economy, efficiency, and effectiveness of the Technical Training Center's operations.

Open Recommendations	Actions Pending
<p>1. Revise MD 13.1 to require that property inventories should include independent verification of the property by someone other than the property holder.</p>	<p>All property custodians received interim guidance requiring property inventories to include independent verification by someone other than the property holder, in preparation for the FY 2008 biennial inventory, which is currently ongoing. The FY 2008 biennial inventory plan was developed and executed to comply with this requirement. Staff assigned to revise Management Directive (MD) 13.1 have also been conducting the biennial inventory and have been unable to dedicate sufficient time to complete the MD revision. Additional required changes to MD 13.1 were identified since the last update provided to the Office of the Inspector General on February 29, 2008, (e.g., definition of sensitive items). An update to MD 13.1 incorporating all the required changes is currently under staff review. Staff will complete the review and incorporation of comments by August 31, 2008, at which time they will transmit the MD revision to offices and regions for review and comment. The final approval process concludes February 27, 2009.</p> <p><i>continued</i></p>

AUDIT OF THE NRC'S TECHNICAL TRAINING CENTER (OIG-07-A-05) *continued*

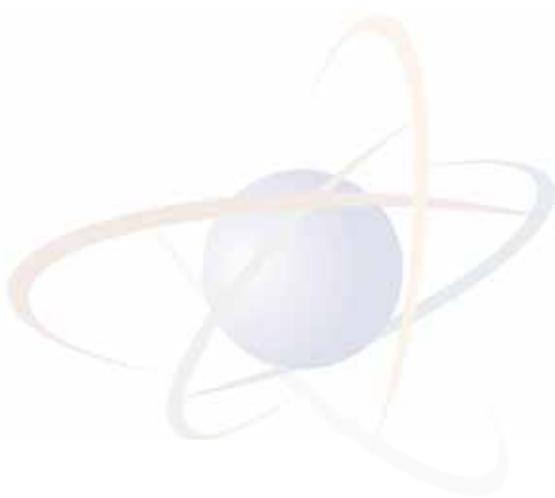
Open Recommendations	Actions Pending
3. Update and finalize training policies and procedures.	<p>Staff completed procedures by the dates reported in the NRC's response to the OIG, with the following exceptions:</p> <ul style="list-style-type: none"> • OP-401, "Course Scheduling." The original scheduled completion date was September 28, 2008. Procedure development is now tied to the resolution of Recommendations 6 and 7 of IG Evaluation (Audit) OIG 08-A-13, action on which should conclude on June 30, 2009. • OP-402, "Course Registration." The implementation of iLearn (the NRC's Learning Management System) has automated the process previously performed by staff and, as a result, rendered the subject procedure unnecessary. • OP-403, "Course Administration." An update to the procedure reflecting the implementation of LMS is due on December 20, 2008.
9. Periodically rotate cognizant instructor responsibilities.	<p>OP-404, "Training Materials Control" addresses this recommendation in part. By memorandum dated August 25, 2008, the OIG stated that this recommendation will close upon development and implementation of additional policy requiring periodic rotation of cognizant instructor responsibilities.</p>
10. Establish a more formal method to track and trend Technical Training Center course evaluations and periodically analyze trends for appropriate action.	<p>Staff will modify OP-403 (or develop a new procedure) to address this recommendation by December 20, 2008.</p>
11. Include questions specific to instructor performance on all course evaluations.	<p>Staff will modify OP-403 (or develop a new procedure) to address this recommendation by December 20, 2008.</p>

AUDIT OF THE NRC’S REGULATION OF NUCLEAR FUEL CYCLE FACILITIES (OIG-07-A-06)

January 10, 2007

This audit determined whether the NRC has an effective and efficient approach to fuel cycle facility oversight. The audit found that the NRC could enhance the current Fuel Cycle Facility Oversight Program by developing and implementing a framework modeled after a structured process, such as the Reactor Oversight Process (ROP).

Open Recommendations	Actions Pending
<p>1. Fully develop and implement a framework for the Fuel Cycle Facility Oversight Program (FCFOP) that is consistent with a structured process, such as the Reactor Oversight Process (ROP).</p>	<p>Agency corrective actions consist of initiatives related to improving fuel cycle oversight, including performing a structured evaluation of integrated safety analysis (ISA) annual updates, providing fuel cycle input to a revision of NRC enforcement policy, and completing a safety culture pilot plan. The staff has completed the review of the 2007 ISA annual updates and has developed changes to the review process. The ISA update review will conclude following the review of the next annual updates at the end of 2008. The staff has drafted proposed changes to the NRC enforcement policy to align the policy with revisions to Title 10 of the Code of Federal Regulations, Part 70, “Domestic Licensing of Special Nuclear Material,” (10 CFR Part 70). The staff is conducting public meetings with fuel cycle industry representatives to develop final comments. Enforcement policy revision will conclude when staff issues the new policy at the end of 2008. The most lengthy corrective action is the two-phase NMSS Safety Culture Project Plan. Phase I consists of information gathering, which is complete. Phase II consists of developing a strategic plan to implement the pilot, followed by implementation. The safety culture pilot will conclude when Phase II ends in August of 2009.</p>



AUDIT OF THE NRC'S BADGE ACCESS SYSTEM (OIG-07-A-10)

January 23, 2007

This audit determined whether the current badge access system meets its required operational capabilities and provides for the security, availability, and integrity of the system data.

Open Recommendations	Actions Pending
<p>8. Write and implement badge access system operating procedures that provide system user guidance and address Recommendations 5 through 7.</p>	<p>The badge access system operating procedures were updated to enhance system user guidance as part of the updated manual for both the personnel security branch and the facilities security branch in November 2007. An update to Recommendation 8 is currently scheduled for December 29, 2008.</p>
<p>10. Replace the current visitor badges with expiring paper badges.</p>	<p>The NRC was unsuccessful in utilizing paper badges in the past (sticker-type badges damaged clothing or simply fell off). As part of the consulting services contract for Homeland Security Presidential Directive 12 (HSPD-12), the contractor recommended that temporary date-stamped, clip-on visitor badges could be a feasible alternative to the current permanent visitor badges. The clip-on temporary visitor badges would be date-stamped and valid only for 1 day at a time. The NRC will make the decision whether to convert to the clip-on visitor badge by June 30, 2009.</p>
<p>13. In accordance with NRC requirements for listed systems, develop an access system security plan, and appoint an information system security officer.</p>	<p>ADM received several security categorization documents for updating to newer templates, causing a delay in the process. Since ACCESS is a listed system on a fully enclosed network, the Office of Information Systems (OIS) contractor did not give this task a high priority, causing additional delay. Once approved, the staff will forward the security categorization documentation, which officially lists the Information System Security Officer for ACCESS, with the remainder of the certification and accreditation (C&A) documentation. Since ACCESS is not on the agency priority list for C&A this fiscal year, the staff should provide the C&A package for approval by March 31, 2009.</p>
<p>15. Complete the actions necessary to address the access weaknesses contained in the penetration test reports.</p>	<p>ACCESS is on a fully enclosed network environment and does not connect to any other system or the Internet. Due to other high priorities, ADM has determined that it is not cost-effective or imperative to correct the findings from the penetration tests with the current, closed network, since the implementation of HSPD-12 will result in system upgrade or replacement. Many of the findings were related to weaknesses present only if the system is connected to other systems or to the Internet. ADM will work with the CSO to ensure that CSO corrects any issues during system upgrade or replacement. The Division of Facilities and Security (DFS) will then determine a schedule to correct those actions impacting any weaknesses still in the upgraded system. An update to Recommendation 15 is currently scheduled for December 29, 2008.</p>

AUDIT OF THE NRC'S NUCLEAR MATERIALS EVENTS DATABASE (OIG-07-A-11)

March 23, 2007

Open Recommendations	Actions Pending
1. Develop and implement written procedures for the operation of the Fuel Cycle Nuclear Material Event Database (FCNMED) to ensure that the mechanism is available for staff to share and access data on Category I fuel cycle facilities.	<p>In January–April 2008, the staff reviewed event reports in FCNMED to identify and redact SUNSI and other sensitive information. The staff placed redacted event reports in public ADAMS on May 13, 2008. The Nuclear Materials Events Database (NMED) contractor placed them in NMED very soon after.</p> <p>The staff has created an automated system whereby each event report from a Category I fuel cycle facility is withheld from public disclosure until after the project staff has reviewed the report and released it in its entirety or in a redacted form. The new Idaho National Laboratory (INL) contract, which started October 1, 2008, includes the retirement of FCNMED by February 2009.</p>
3. Conduct a quality assurance review of the FCNMED data to ensure that the database includes all pertinent data.	The staff will complete by January 12, 2009, a quality assurance review of NMED data to assure that all redacted FCNMED reports and pertinent data are available in NMED.

SUMMARY REPORT AND PERSPECTIVES ON BYPRODUCT MATERIAL SECURITY AND CONTROL (OIG-07-A-12)

March 30, 2007

While the NRC has implemented or planned a variety of measures to regulate and provide for the security of byproduct material in the post-September 11 era, the agency in its approach to byproduct material security, has not adequately identified and evaluated byproduct material security risks. Specifically, the NRC has not conducted an impartial and comprehensive look inwards at its own business and regulatory processes. Consequently, the agency is not aware of potential weaknesses and vulnerabilities in its byproduct material security program. Furthermore, the NRC's approach has resulted in agency policy and practices that do not consider the full range of potential consequences of a radiological dispersal device (RDD, or "dirty bomb").

Open Recommendations	Actions Pending
1. Convene an independent panel of experts external to the agency to identify agency vulnerabilities concerning the NRC's materials licensing and tracking programs, and to validate the agency's ongoing byproduct-material security efforts.	In September 2007, the Commission approved a comprehensive plan to address needed changes in the NRC's process for issuing licenses for radioactive sources. The plan called for an independent, external review panel to identify potential weaknesses or security gaps in the NRC's materials licensing program. The independent panel issued its report and recommendations on the NRC's materials licensing program in March 2008. The staff has incorporated the panel's recommendations into the overall corrective action plan for the materials licensing program.

AUDIT OF THE NRC'S NONCAPITALIZED PROPERTY (OIG-07-A-14)

July 12, 2007

This audit determined whether the NRC has established and implemented an effective system of management controls for maintaining accountability and control of noncapitalized property.

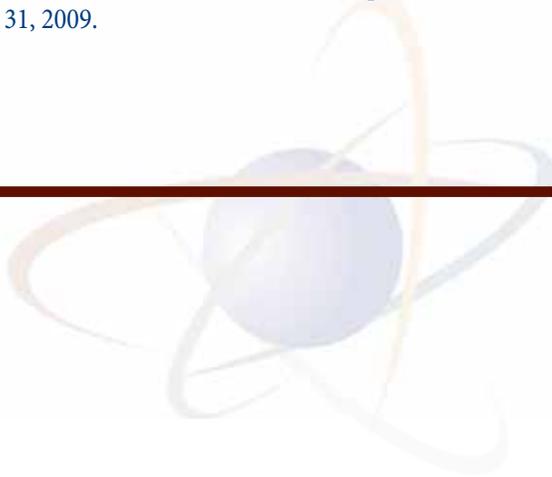
Open Recommendations	Actions Pending
<p>2. Incorporate property management duties and responsibilities into all property custodian and alternate property custodian performance evaluations.</p>	<p>The NRC offices received the third memorandum on this subject on October 30, 2007. All offices have responded, and all but two have completed the requested action. The remaining offices are targeted to incorporate property management duties and responsibilities into all property custodian and alternative property custodian (if applicable) performance plans by October 31, 2008.</p>
<p>7. Modify MD 13.1, "Property Management," to reference, where applicable, MD 12.5, "NRC Automated Information Security Program," to include procedures for coordinating with OIS regarding missing property that contains or may contain personally identifiable information (PII).</p>	<p>Staff assigned to revise MD 13.1 have also been conducting the biennial inventory and so have been unable to dedicate sufficient time to complete the MD revision. Additional required changes to MD 13.1 were identified since the last update provided to the Office of the Inspector General on February 29, 2008 (e.g., definition of sensitive items). The staff is currently reviewing an update to MD 13.1 incorporating all the required changes. The review and incorporation of comments should conclude by August 31, 2008, at which time the offices and regions will review and comment on the MD 13.1 revision. The final approval process should conclude by February 27, 2009. The modified NRC Form 395 "Report of Property for Survey" now includes a requirement to report any missing property containing PII to the CSO. An update to Recommendation 7 is scheduled for February 27, 2009.</p>
<p>11. Work with the OIG to modify MD 13.1 to develop a process for notifying the OIG Assistant Inspector General for Investigations of all reports (Form 395 "Report of Property for Survey") of missing sensitive property and missing nonsensitive property with a current value of at least \$1,000.</p>	<p>Staff has worked in collaboration with the OIG Assistant Inspector General for Investigations and has agreed to forward all completed NRC Form 395s reporting missing property with a depreciated value of \$1,000 or more to his organization. The revision of MD 13.1 will include this notification process. As stated in Recommendation 7, the anticipated date for final issuance of MD 13.1 is February 27, 2009.</p>

THE NRC'S STATUS OF RECOMMENDATIONS: AUDIT OF THE NRC'S LICENSE RENEWAL PROGRAM (OIG-07-A-15)

September 5, 2007

The Office of the Inspector General conducted an audit of the license renewal review program, and while acknowledging the existence of a comprehensive license renewal review process, the OIG identified several areas where improvements would enhance program operations and made eight recommendations. The Office of Executive Director issued a status report on September 11, 2008, which indicated Recommendations 1, 2, 5, 6, and 8 are closed, and Recommendations 3, 4, and 7 are resolved. An update of the status of the recommendations is due by February 27, 2008.

Open Recommendations	Actions Pending
<p>3. Clarify guidance and adjust procedures for auditor's and inspector's removal of licensee-provided documents from license-renewal sites.</p>	<p>The license renewal staff, in a joint effort with the inspection program staff, the regions, and the Office of General Counsel developed consistent guidance for removal of applicant or licensee documents from applicant or licensee sites.</p>
<p>4. Establish requirements and management controls to standardize the conduct and depth of license renewal operating experience reviews.</p>	<p>The staff provided additional guidance and management controls to standardize the conduct and depth of license renewal operating experience reviews. The Project Manager Handbook includes enhanced guidance in "Operating Experience Review Responsibilities." All regional offices participated in a conference call to ensure consistent implementation of these expectations. The OIG will close this recommendation once additional guidance is provided to reflect management's expectations that license renewal audit teams will independently verify that the operating experience information is provided by the licensee in its application.</p>
<p>7. Establish a review process to determine whether or not Interim Staff Guidance (ISG) meets the provisions of 10 CFR 54.37 (b), "Additional Records and Recordkeeping Requirements," and document accordingly.</p>	<p>The staff continues to enhance the current guidance, "Process for Interim Guidance Development and Implementation," to determine and document whether the ISG meets the provisions of 10 CFR 54.37(b). The staff plans to issue the approved ISG by March 31, 2009.</p>



**REVIEW OF THE NRC'S PROCESS FOR PLACING DOCUMENTS IN THE ADAMS PUBLIC AND
NONPUBLIC LIBRARIES (OIG-07-A-16)**

September 6, 2007

This audit determined the effectiveness and consistency with which staff profiles and processes documents for entry into the public or nonpublic ADAMS libraries.

Open Recommendations	Actions Pending
<p>1. Update MD 3.4 so that it reflects the underlying principles of how to determine whether an official agency record should be public or nonpublic, and describes the relationship with other agency reviews for information sensitivity (e.g., personally identifiable information, SUNSI).</p>	<p>The staff has updated Management Directive (MD) 3.4, "Release of Information to the Public." MD 3.4 now reflects the underlying principles of how to determine if an official agency record (OAR) should be made public or remain nonpublic. It further explains the relationship with other agency reviews for information sensitivity. On May 1, 2008, the staff sent MD 3.4 to the Office of the Commission (OCM) for review and concurrence. On August 4, 2008, OIS received 10 questions on the MD. OIS provided the Office of Executive Director of Operations (EDO) with responses to the questions for review. Publication of the updated MD 3.4 is targeted for the second quarter of FY 2009.</p>
<p>2. Create a supplemental guidance document that is updated routinely to include, to the extent practicable, categories of information routinely not made public.</p>	<p>The staff has completed a supplemental guidance document titled "Guidance for Determining the Public Availability of NRC Documents," which identifies the categories of documents that are routinely not made public. Additionally, the guidance document includes the categories of information that are routinely made public. The OIS maintains the final version of this new guidance document, referenced in the revised MD 3.4 and on the NRC internal Web site at http://www.internal.nrc.gov/2008_MD-Companion-Doc.pdf. The updated MD 3.4 will require all offices to routinely monitor the guidance document and notify OIS when it requires modification. Offices will review and update the supplemental guidance document on an annual basis. Interim changes will also be accommodated.</p>
<p>3. After MD 3.4 and supporting guidance are updated and consolidated, conduct a training-needs analysis and develop appropriate training for staff with responsibility for determining whether ADAMS records should be publicly or non-publicly available.</p>	<p>OIS staff is working with the Office of Human Resources to develop appropriate training for staff with responsibility for determining whether ADAMS records should be publicly or nonpublicly available. Once the training is developed, it will become a part of the existing ADAMS training program available to staff at the Professional Development Center. Once implemented, the staff will make informed decisions when determining whether documents should be publicly or nonpublicly available. We currently estimate that the revised training courses will be available in the second quarter of FY 2009.</p>

continued

REVIEW OF THE NRC’S PROCESS FOR PLACING DOCUMENTS IN THE ADAMS PUBLIC AND NONPUBLIC LIBRARIES (OIG-07-A-16) *continued*

Open Recommendations	Actions Pending
<p>4. Develop a mechanism to indicate the rationale for designating a document as public or nonpublic. This rationale should be sufficiently detailed to allow for an assessment of whether the staff applies agency criteria correctly.</p>	<p>During the MD 3.4 concurrence phase, the Office of General Counsel (OGC) recommended that staff must document the rationale only for nonpublic designated documents. The OIS discussed this with Office of the Inspector General (OIG) staff and OIG agreed with the OGC recommendation. To document the rationale for nonpublic designations in the ADAMS document profile, staff must reference the appropriate item number in the “Guidance for Determining the Public Availability of NRC Documents.” The rationale tag will be a permanent part of each OAR’s metadata and will permit an assessment of whether agency criteria are being applied correctly. On May 1, 2008, OIS sent MD 3.4 to the Office of the Commission (OCM) for review and concurrence. On August 4, 2008, OIS received 10 questions on the MD and provided responses to the questions to the Office of the Executive Director for Operations (EDO) for review. Publication is targeted for the second quarter of FY 2009.</p>
<p>5. Require offices to use the mechanism developed in response to Recommendation 4 to provide the rationale for public or nonpublic designation of official agency records.</p>	<p>The revised MD 3.4 requires all staff to use the mechanism described in our response to Recommendation 4. Publication of the MD will communicate this to agency staff. On May 1, 2008, MD 3.4 went to the OCM for review and concurrence. On August 4, 2008, the OIS received 10 questions on the MD. The OIS provided responses to the questions to the EDO for their review. Publication is targeted for the second quarter of FY 2009.</p>
<p>6. Conduct periodic assessments of the accuracy with which NRC staff apply the agency’s criteria for designating records as public or nonpublic by assessing a random sample of records against the agency’s criteria for making these determinations.</p>	<p>The NRC will conduct annual assessments of the accuracy with which the staff applies the agency criteria for designating records as public or nonpublic by assessing a random sample of records against the agency criteria for making these determinations after the issuance of MD 3.4. On May 1, 2008, MD 3.4 went to the OCM for review and concurrence. On August 4, 2008, the OIS received 10 questions on the MD. The OIS provided responses to the questions to the Office of the Executive Director for Operations (EDO) for review. Publication is targeted for the second quarter of FY 2009.</p>
<p>8. Add a nonpublic pending review category to the electronic regulatory information distribution system (ERIDS) notifications and clarify the language in the notifications to convey the need to finalize the document availability as either public or nonpublic.</p>	<p>The updated ADAMS software now includes a change that clearly identifies documents with “Non-Public Pending Review” status in the ERIDS notifications sent to staff. This update, ADAMS Release 4.7, was deployed to staff in August and September 2008.</p>

**AUDIT OF ASSESSMENT OF SECURITY AT NRC BUILDINGS IN ROCKVILLE AND BETHESDA, MD
AND LAS VEGAS, NV (OIG-07-A-18)**

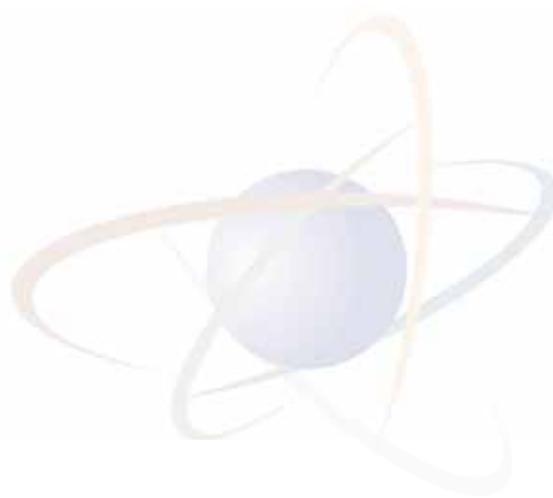
September 25, 2007

These security assessments determined the adequacy of physical security and emergency planning measures of the identified NRC buildings.

Open Recommendations	Actions Pending
10. Apply Mylar film to any remaining exterior doors and windows where it has not yet been installed.	Staff prepared a statement of work and reimbursable work order on September 12, 2008, for the operation and maintenance contractor to place the additional Mylar film on any remaining exterior doors and windows. The contractor has installed Mylar film on all remaining exterior doors and windows as of October 2, 2008. The staff has completed actions related to this recommendation, pending closure by OIG.
11. Post signs near vehicle entrance directing pedestrians further west along Marinelli Avenue, and paint “Crosswalk” to direct pedestrians along a safe path to two controlled entry points.	Implementation of HSPD-12 included an overall assessment of physical access controls at the headquarters complex. An NRC consultant completed an assessment of Recommendation 11 on February 29, 2008. Based on that assessment, staff is preparing a proposed plan and cost analysis to install a security fence to enclose the rear of the complex. The fence will control pedestrian traffic entering at the P1 levels to the One White Flint North and Two White Flint North buildings. Due to the complexity of the terrain and associated easements with the NRC property, the NRC awarded an architectural and engineering contract to Oudens & Knoop on September 26, 2008. Oudens & Knoop anticipate completing the design phase of this project in 45 days. The construction phase of this project will start in the spring of 2009. Recommendation 11 is scheduled for completion on June 30, 2009.
13. Refresh and increase width of painted pedestrian walkways in garage, and add additional lighting.	Repainting the walkways and crosswalks was completed on May 30, 2008. To enhance the garage lighting in walkways and crosswalks, Administration has ordered additional, more energy-efficient LED (light-emitting diode) lights. These lights are capable of providing more lumens and will enhance lighting for pedestrians. Recommendation 13 is scheduled for completion on November 17, 2008.
21. Develop post orders for guards that specifically address contingency plans for events that may occur.	NRC staff attended a meeting with the Federal Protective Service (FPS) and the onsite guard force on May 2, 2008, to complete and update the Las Vegas Hearing Facility Guard Post Orders.
	<i>continued</i>

AUDIT OF ASSESSMENT OF SECURITY AT NRC BUILDINGS IN ROCKVILLE AND BETHESDA, MD AND LAS VEGAS, NV (OIG-07-A-18) *continued*

Open Recommendations	Actions Pending
<p>23. Develop and refine operational and security plans in preparation for future public hearings.</p>	<p>NRC staff supported the development of an NRC Information Guide for Atomic Safety and Licensing Board Proceedings at the Las Vegas Hearing Facility. This document is in pamphlet form and will serve as an informational handout for members of the public who wish to attend an adjudicatory proceeding. The pamphlet includes requirements for entrance and screening, prohibited items, etiquette, and parking. The pamphlet was published in December 2007.</p> <p>As stated in the response to Recommendation 21, on May 2, 2008, the NRC has coordinated Guard Post Orders and contingency plans with FPS and the security force.</p>
<p>26. Develop implementing procedures for specific topics too sensitive to include in the occupant emergency plan.</p>	<p>As stated in the responses to Recommendations 21 and 23, administration coordinated the revised operational, security, and contingency plans with the FPS and the onsite guard force to include sensitive topics not included in the occupant emergency plan.</p>
<p>27. Conduct tabletop, functional, or full-scale exercises to assess ability to respond to large demonstrations, evacuations, a large influx of personnel attending hearings, media control, etc.</p>	<p>On June 16, 2008, the staff conducted a 4-hour table-top exercise, testing security and crisis response capabilities with Las Vegas Hearing Facility personnel, local law enforcement, and the FPS regional commander.</p>



INDEPENDENT EVALUATION OF THE NRC'S IMPLEMENTATION OF THE FEDERAL INFORMATION SECURITY MANAGEMENT ACT FOR FY 2007 (OIG-07-A-19)

September 28, 2007

An independent evaluation of the NRC's implementation of the Federal Information Security Management Act for FY 2007 found that the NRC information security program needed improvements.

Open Recommendation	Action Pending
1. Review and correct as needed all security categorizations so that they consistently reflect the information types that reside on the systems.	The OIG's recommendation is now part of the agency's security categorization process by reviewing current line of business or service type, subfunction or service component, and any other related mission types.
2. Categorize all NRC major applications and general support systems in accordance with Federal Information Processing Standard (FIPS) 199, "Standards for Security Categorization of Federal Information and Information Systems."	The agency has completed categorization of all major applications and general support systems in accordance with FIPS 199.
3. Conduct annual self-assessments in accordance with current Office of Management and Budget and the National Institute for Standards and Technology guidance.	The agency has completed annual control testing on all NRC-owned major applications and general support systems.
10. Develop and implement a methodology for identifying which listed systems reside on the NRC network and which do not.	The agency continues to update the system inventory database reporting tool to reflect which listed systems reside on the NRC network and which do not. The OIS works with system owners on the procedure to ensure the system database reflects changes in a timely and efficient fashion. Currently, 95 percent of our systems in inventory reflect the correct system type. The NRC is also working on restructuring its database to make reporting and data entry more efficient. Database restructuring is now complete, pending closure by OIG.
11. Develop and implement quality assurance procedures for the Plan of Action and Milestones (POA&Ms).	<p>In addition to documenting the procedures, CSO will also undertake other steps related to improving the quality of POA&M information. This will include:</p> <ul style="list-style-type: none"> • documentation of procedures for conducting independent verification and validation of POA&M to assure their adequacy as part of the security assessment review process • acquiring additional contract support to assist in establishing a compliance review process in which CSO will review security documentation, conduct vulnerability scanning, and meet with each system owner on an annual basis to verify

continued

INDEPENDENT EVALUATION OF THE NRC'S IMPLEMENTATION OF THE FEDERAL INFORMATION SECURITY MANAGEMENT ACT FOR FY 2007 (OIG-07-A-19) *continued*

Open Recommendation	Action Pending
<p>11. Develop and implement quality assurance procedures for the Plan of Action and Milestones (POA&Ms). <i>continued</i></p>	<p>the status of remediation efforts; to assess the comprehensiveness of planned corrective action; and to validate the accuracy of tasks, responsibilities, and milestones for each outstanding weakness.</p> <p>These activities will take place quarterly targeting approximately 25 percent of the overall number of POA&M. The estimated completion date is fourth quarter FY 2009.</p>
<p>12. Follow NIST guidance and only issue Interim Approval to Operate (IATO) with documentation that includes accurate identification of risks, risk mitigation plans, and security plans.</p>	<p>The NRC has implemented the change in the C&A process and has posted relevant accreditation decision process information on the project management methodology (PMM) Web site. The agency's new designated approving authority (DAA) makes a decision based on the results of the security certification package, which provides the DAA with the essential information needed to make a credible, risk-based decision for authorization to operate, interim approval to operate (IATO), or denial of authorization to operate information systems. All systems with IATO will be revisited to ensure a new procedure is followed before the issuing of IATO.</p>
<p>13. Develop and implement quality assurance procedures to ensure that certification and accreditation documentation is consistent with NIST guidance.</p>	<p>The NRC has developed an evaluation criteria checklist for three additional documents. The agency will continue to develop the evaluation checklist and will distribute the checklist to all system owners and certifying agents. The NRC is currently soliciting feedback from certifying agents and system owners on the checklist as developed so far. The NRC also plans to use contract support for reviewing and providing feedback on documents and packages to system owners.</p>
<p>14. Develop and implement procedures for ensuring that employees and contractors with significant IT security responsibilities are identified, that they receive security awareness and training, and that the individual and associated training are readily correlated. This recommendation replaces Recommendation 10 from OIG-05-A-21, "Independent Evaluation of NRC's Implementation of FISMA for Fiscal Year 2005."</p>	<p>All NRC offices have provided their identification of individuals with significant IT security responsibilities to CSO. CSO will request updates on the identification on an annual basis. CSO provided system administrators with a Microsoft Windows server security course, and 14 staff members attended the course. CSO also provided system owner training to system owners in August and September 2008. Fifty-four percent of system owners attended the course. The iLearn system will list the course, enabling others to take it. CSO is developing a role-based training plan and expects to have the plan completed by the end of the first quarter of FY 2009.</p>

APPENDIX C

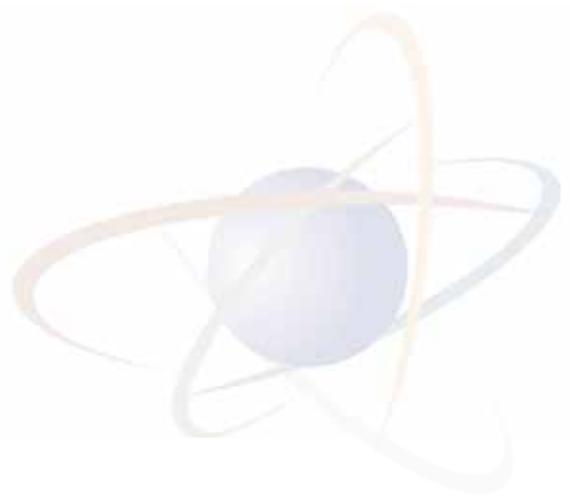
SUMMARY OF FINANCIAL STATEMENT AUDIT AND MANAGEMENT ASSURANCES





Photo Courtesy of DTE Energy.

The Enrico Fermi Nuclear Generating Station, a nuclear power plant on the shore of Lake Erie, in Frenchtown Charter Township, Monroe County, MI.



SUMMARY OF FINANCIAL STATEMENT AUDIT AND MANAGEMENT ASSURANCES

SUMMARY OF FINANCIAL STATEMENT AUDIT

Audit Opinion—Unqualified					
Restatement—No					
Material Weaknesses	Beginning Balance	New	Resolved	Consolidated	Ending Balance
Information Systemwide Security Controls	1	-	(1)	-	-
Total Material Weaknesses	1	-	(1)	-	-

SUMMARY OF MANAGEMENT ASSURANCES

Effectiveness of Internal Control over Financial Reporting (FMFIA § 2)

Statement of Assurance—Unqualified

There are no Material Weaknesses for Internal Control Over Financial Reporting.

Effectiveness of Internal Control over Operations (FMFIA § 2)

Statement of Assurance—Unqualified

Material Weaknesses	Beginning Balance	New	Resolved	Consolidated	Reassessed	Ending Balance
Information Systemwide Security Controls	1	-	(1)	-	-	-
Total Material Weaknesses	1	-	(1)	-	-	-

Conformance with Financial Management System Requirements (FMFIA § 4)

Statement of Assurance—Systems Conform to Financial Management System Requirements

There are no nonconformances with Financial Management System Requirements.

Compliance with Federal Financial Management Improvement Act (FFMIA)

	Agency	Auditor
Overall Substantial Compliance	No	No
1. Systems Requirements	No	No
2. Accounting Standards	Yes	Yes
3. United States Standard General Ledger at Transaction Level	Yes	Yes



Photo Courtesy of NRC Photo Library.

Michael Johnson, front row right, Director of the Office of New Reactors, and members of his staff receive the Victoria County application from Ken Ainger, center, of Exelon.



APPENDIX D

VERIFICATION AND VALIDATION OF NRC'S MEASURES AND METRICS

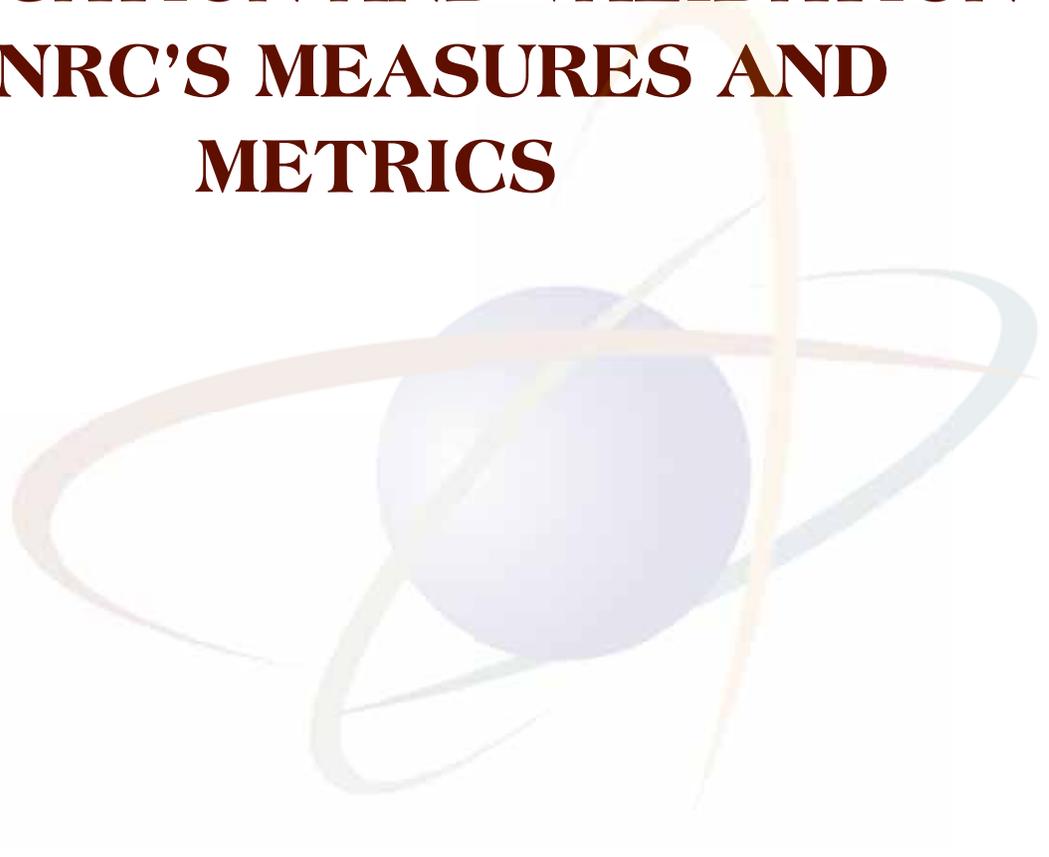
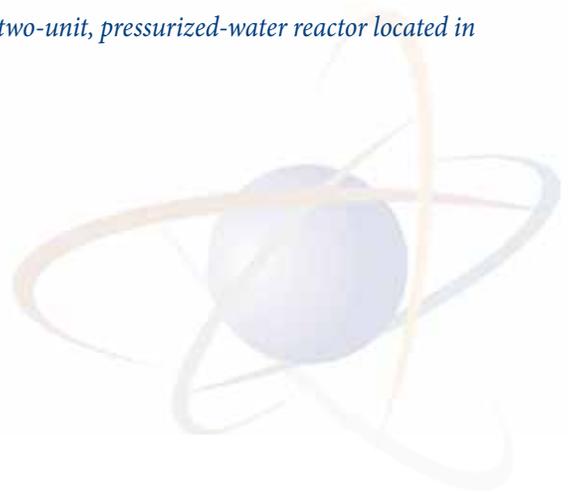




Photo Courtesy of the Entergy Corporation.

Arkansas Nuclear One is the only nuclear power plant in Arkansas. It is a two-unit, pressurized-water reactor located in Russellville, AR.



THE NRC'S DATA COLLECTION PROCEDURES

In the Performance and Accountability Report, the U.S. Nuclear Regulatory Commission (NRC) measures the agency's performance against its strategic goals related to safety and security. The agency obtained or derived most of the data used in this measurement from the NRC's abnormal occurrence (AO) data and from reports submitted by licensees. The agency has amended the AO criteria to ensure that the criteria are consistent with both the NRC Strategic Plan for fiscal years (FY) 2008–2013 and the NRC rulemaking on Title 10 of the *Code of Federal Regulations* (10 CFR) Part 35, "Medical Use of Byproduct Materials."

The NRC developed its AO criteria to comply with Section 208 of the Energy Reorganization Act of 1974, as amended. The Act requires the NRC to inform Congress of unscheduled incidents or events that the Commission determines to be significant to public health and safety. The agency includes events that meet the AO criteria in the yearly publication of NUREG-0090, "Report to Congress on Abnormal Occurrences." In 1997, the Commission determined NUREG-0090 should also include events that meet AO criteria that occur at Agreement State-licensed facilities. Therefore, all events, whether they occur at an Agreement State-licensed facility or an NRC-licensed or regulated facility, fall under the agency's AO criteria and reporting requirements.

Data for AOs originate from external sources, such as Agreement States and NRC licensees. The NRC has established procedures for the systematic review and evaluation of events reported by NRC licensees and Agreement State licensees. The NRC believes these data are credible for the following reasons:

- (1) Regulations require that external sources, such as Agreement States and licensees, report the needed information to the NRC.
- (2) The NRC maintains an aggressive inspection program that audits licensees and evaluates Agreement State programs to determine whether they are reporting information as required by regulations.
- (3) The NRC has procedures for reviewing and evaluating licensees.

The NRC database systems that support this process include the Licensee Event Report Search System (LERSearch), the Accident Sequence Precursor (ASP) Database, the Nuclear Materials Event Database (NMED), and the Radiation Exposure Information Report System.

The objective of this systematic review and evaluation of licensee and Agreement State data is to identify events that are significant from the standpoint of public health and safety, based on criteria that include specific thresholds. The NRC uses a number of sources to determine the reliability and the technical accuracy of event information reported by licensees and Agreement States. Such sources include (1) NRC licensee reports, (2) NRC inspection reports, (3) Agreement State reports, (4) periodic review of Agreement State regulatory programs, (5) NRC consultant and contractor reports, and (6) U.S. Department of Energy operating experience weekly summaries. In addition, there are daily interactions and exchanges of event information between headquarters and the regional offices, as well as periodic conference calls between headquarters, the regions, and Agreement States to discuss event information. The NRC headquarters program offices, regional offices, and agency management validate and verify events that meet the AO criteria before submission of the information to Congress.

The agency action review meeting provides another opportunity for the NRC's senior management to discuss significant events, licensee performance issues, trends, and the actions the NRC needs to take to mitigate recurrences.

The NRC's computer security program maintains strict data protection. It also provides administrative, technical, and physical security measures to protect the agency's information, automated information systems, and information technology infrastructure. These measures include special safeguards to protect classified information, unclassified safeguards information, and sensitive unclassified information that are processed, stored, or produced on designated automated information systems.

STRATEGIC GOAL 1—SAFETY

Ensure Adequate Protection of Public Health and Safety and the Environment

NUCLEAR REACTOR SAFETY

Strategic Outcomes:

- Prevent the occurrence of any nuclear reactor accidents.
- Prevent the occurrence of any inadvertent criticality events.
- Prevent the occurrence of any acute radiation exposures resulting in fatalities.
- Prevent the occurrence of any releases of radioactive materials that result in significant radiation exposures.
- Prevent the occurrence of any releases of radioactive materials that cause significant adverse environmental impacts.

VERIFICATION:

Licensees report any nuclear reactor events at their facilities in licensee event reports (LERs). Through review of LERs, the NRC staff would identify any nuclear reactor accidents, deaths from acute radiation exposures, events that result in significant radiation exposure or releases of radioactive materials that cause significant adverse environmental impacts that meet the criterion for an abnormal event. During periodic meetings, NRC's AO coordinators discuss each potential AO to determine whether it meets the AO reporting criteria. In addition, the NRC specialists periodically conduct inspections to assess licensee compliance with reporting criteria as well as radiological and environmental release criteria. If a licensee reports an event involving core damage, NRC inspectors carefully investigate the event to ensure the validity of the information in the report. Providing an additional layer of verification, an NRC-employed resident inspector monitors each reactor facility on a real-time basis. The resident inspector verifies the safe operation of the facility and is aware of any instances in which core damage has occurred or radiation has been released from the reactor in excess of reporting limits.

The NRC staff evaluates potential AO events using specific criteria. The NRC's Office of Nuclear Regulatory Research makes the final determination of which events should be recommended to the Commission as abnormal occurrences. NRC Management Directive 8.1, "Abnormal Occurrence Reporting Procedure," describes the abnormal occurrence reporting process.

VALIDATION:

Prevent the occurrence of any nuclear reactor accidents. The NRC Severe Accident Policy Statement defines nuclear reactor accidents as those events that result in substantial damage to the reactor fuel, whether or not serious offsite consequences occur.

Prevent the occurrence of any inadvertent criticality events. Events collected under this strategic outcome are actual occurrences of accidental criticality. Such events could compromise public health and safety, the environment, and the common defense and security. Events of this magnitude are rare. If such an event occurred, the NRC would conduct a prompt and thorough investigation to determine root causes and consequences of the event. The agency would also take necessary actions to mitigate the situation and prevent recurrence.

Prevent the occurrence of any acute radiation exposures resulting in fatalities. Determining whether or not any deaths result from acute radiation exposure is essential to protecting public health and safety. Events of this magnitude are rare. If such an unlikely event occurred, the NRC would conduct a prompt and thorough investigation to determine root causes and consequences of the event. The agency would also take any necessary actions to mitigate the situation and prevent recurrence. This strategic outcome measure is a direct measurement of the occurrence of radiation-related deaths at nuclear reactors.

Prevent the occurrence of any releases of radioactive materials that result in significant radiation exposures. Nuclear power generation produces radiation, a form of energy that can be harmful if not properly controlled. Measuring the number of events resulting in significant radiation exposures, as well as any deaths from radiation exposure, indicates

whether radiation-related deaths and illness are being prevented. The NRC defines significant radiation exposures as those that result in unintended permanent functional damage to an organ or a physiological system. This should be determined by a physician, in accordance with Abnormal Occurrence Criterion I.A.3.

Prevent the occurrence of any releases of radioactive materials that cause significant adverse environmental impacts. The radiation produced in the process of generating power from nuclear materials can also harm the environment if it is not properly controlled. A radiation release that has the potential to adversely affect the environment is currently undefined. As a surrogate for this performance measure, the NRC collects data on the frequency with which radioactive material is released into the environment in excess of specified limits. NUREG-0090, Appendix A, Criterion I.B.1, defines such releases as those involving, “the release of radioactive material to an unrestricted area in concentrations which, if averaged over a period of 24 hours, exceed 5,000 times the values specified in Table 2 of Appendix B [Annual Limits on Intake (ALIs) and Derived Air Concentrations (DACs) of Radionuclides for Occupational Exposure; Effluent Concentrations; Concentrations for Release to Sewerage.] to 10 CFR Part 20, unless the licensee has demonstrated compliance with 20.1301 [10 CFR 20.1301, “Dose Limits for Individual Members of the Public,”] using 20.1302(b)(1) or 20.1302 (b)(2)(ii).” The essence of the criterion is that events that result in unintended permanent functional damage to an organ or a physiological system, as determined by a physician, are used as the measure for events that result in releases of radioactive material causing an adverse impact on the environment. Licensees report such events in LERs, which are sent to the NRC as reportable occurrences. This strategic outcome measure is a direct measurement of instances in which harmful impacts on the environment occur from nuclear reactors.

Performance Measures:

- Number of new conditions evaluated as red (high safety significance) by the NRC’s Reactor Oversight Process (ROP).
Reactor Safety Target: Less than or equal to 3

VERIFICATION:

The NRC collects data for this performance measure in two ways as part of the agency’s Reactor Oversight Process (ROP). The NRC inspectors collect inspection findings at least once every 3 months. Inspectors use formal, detailed inspection procedures to review plant operations and maintenance. As part of the ROP significance determination process, NRC managers review inspection findings. Licensees collect the data for performance indicators and submit them to the NRC at least once every 3 months. The significance of the data is determined by thresholds for each indicator. The NRC conducts inspections of licensees’ processes for collecting and submitting the data to ensure completeness, accuracy, consistency, timeliness, and validity.

The NRC enhances the quality of its inspections through inspector feedback, periodic reviews of results, and a rigorous inspector qualification program. The quality of performance indicators is improved through continuous feedback from licensees and inspectors that is incorporated into guidance documents. The NRC publishes the inspection findings and performance indicators on the agency’s Web site and incorporates feedback received from all stakeholders, as appropriate.

VALIDATION:

The inspection findings and performance indicators used by the ROP cover a broad range of plant operations and maintenance. The NRC managers review significant issues that are identified and inspectors conduct supplemental inspections of selected aspects of plant operations, as appropriate. Plants that are identified as having performance issues, as well as a self-assessment of the ROP, are reviewed by senior agency managers on an annual basis, and the results are reported to the Commission.

This measure is the number of new red inspection findings during the fiscal year plus the number of new red performance indicators during the fiscal year. Programmatic issues at multiunit sites that result in red findings for each individual unit are considered separate conditions for purposes of reporting for this measure. A red performance

indicator and a red inspection finding that are due to an issue with the same underlying causes are also considered separate conditions for purposes of reporting for this measure. Red inspection findings are included in the fiscal year in which the final significance determination was made. Red performance indicators are included in the fiscal year in which the ROP external Web page was updated to show the red indicator.

- Number of significant accident sequence precursors (ASPs) of a nuclear accident.
Reactor Safety Target: Zero

VERIFICATION:

The Commission has an ASP program to systematically evaluate United States nuclear power plant operating experience to identify, document, and rank those operating events that were most significant in terms of the potential for inadequate core cooling and core damage (i.e., precursors). The ASP program evaluation process has five steps. First, the NRC screens operating experience data to identify events or conditions that may be potential precursors to a nuclear accident. The data the NRC evaluates include LERs from a Licensee Event Report Search System (LERSearch) database; incident investigation team or augmented inspection team reviews; the NRC's daily screening of operational events; and other events the NRC staff identifies as candidates. Second, the NRC conducts an engineering review, using specific criteria, to identify those events requiring detailed analyses as candidate precursors. Third, the NRC staff calculates a conditional core damage probability by mapping failures observed during the event to accident sequences in risk models. Fourth, the preliminary potential precursor analyses are provided to the NRC staff and the licensee for independent peer review. However, for ASP analyses of noncontroversial, low-risk precursors in which the ASP results reasonably agree with the significant determination process (SDP) results, formal peer reviews by licensees may not be performed. The NRC staff will continue to perform an in-house review process for all analyses. Lastly, the NRC provides findings from the analyses to the licensee and the public.

It must also be noted that there is a time lag in obtaining ASP analysis results since they are often based on LERs

(submitted up to 60 days after an event) and most analyses take approximately 6 months to finalize. Final data will be reported in the year in which the event occurred.

VALIDATION:

The ASP program identifies significant precursors as those events that have a 1,000 (10^{-3}) or greater probability of leading to a nuclear reactor accident. Significant accident sequence precursor events have a conditional core damage probability (CCDP) or Δ CDP of $> 1 \times 10^{-3}$.

- Number of operating reactors whose integrated performance entered the Manual Chapter 0350 process, the multiple/repetitive degraded cornerstone column, or the unacceptable performance column of the Reactor Oversight Process (ROP) Action Matrix.
Reactor Safety Target: Less than or equal to 3

VERIFICATION:

The NRC uses the ROP to collect data for this performance measure on a continuous basis and publishes it every 3 months. NRC inspectors use detailed formal procedures to conduct inspections of licensee performance; the NRC managers review the results to ensure the completeness, accuracy, consistency, timeliness, and validity of the data.

The NRC enhances the quality of its inspections through inspector feedback, periodic reviews of results, and a rigorous inspector qualification program. The agency also improves inspection quality through continuous feedback from licensees and inspectors that is incorporated into guidance documents. The NRC publishes the data on the agency's Web site and incorporates feedback received from all stakeholders, as appropriate.

VALIDATION:

The information collected by the ROP covers a broad range of plant operations and maintenance. The NRC managers review significant issues and inspectors conduct supplemental inspections of selected aspects of plant operations, as appropriate. Plants that are identified as having performance issues are reviewed by senior agency

managers on an annual basis, and the results are reported to the Commission. The same is true of the agency’s self-assessment of the ROP.

This measure is the number of plants that have entered the Manual Chapter 0350 process, the multiple/repetitive degraded cornerstone column, or the unacceptable performance column during the fiscal year (i.e., were not in these columns or process the previous fiscal year). Data for this measure are obtained from the NRC external Web action matrix summary page that provides a matrix of the five columns with the plants listed within their applicable column and notes the plants in the Manual Chapter 0350 process. For reporting purposes, plants that are the subject of an approved deviation from the action matrix are included in the column or process in which they appear on the Web page.

- Number of significant adverse trends in industry safety performance.

Reactor Safety Target: Less than or equal to 1

VERIFICATION:

The NRC derives data for this performance measure from data supplied by all power plant licensees in LERs, from monthly operating reports, as well as from performance indicator data submitted for the ROP. These data are required by 10 CFR 50.73, Section 50.73, “Licensee Event Report System,” plant-specific technical specifications, or the ROP. Detailed NRC guidelines and procedures are in place to control each of these reporting processes. The NRC reviews these procedures for appropriateness both periodically and in response to licensee feedback. The NRC also conducts periodic inspections of licensees’ processes for collecting and submitting the data to ensure completeness, accuracy, consistency, timeliness, and validity.

All licensees report the data at least once every 3 months. The NRC staff reviews all of the data and conducts inspections to verify safety significant information. The NRC also employs a contractor to review the licensee data, input them into a database, and compile them into various indicators. The agency has established quality assurance processes for

this work and included these in the statement of work for the contract. The agency controls the experience and training of key personnel through the administration of the contract. The contractor identifies discrepancies to both licensees and the NRC for resolution. The NRC reviews the indicators and publishes them on the agency’s Web site on a quarterly basis. When appropriate, the agency also incorporates feedback from licensees and the public.

The NRC sets the target value based on the expected addition of several indicators and a change in the long-term trending methodology.

VALIDATION:

The data and indicators that support reporting against this performance measure provide a broad range of information on nuclear power plant performance. The NRC staff tracks indicators and applies statistical techniques to provide an indication of whether industry performance is improving, remaining steady, or degrading over time. If the staff identifies any adverse trends, the NRC addresses the problem through its processes for addressing generic safety issues and issuing generic communications to licensees. The NRC is developing additional, risk-informed indicators to enhance the current set of indicators. In doing so, the staff considers the costs and benefits of collecting the data through ongoing, extensive interactions with industry regarding the indicators. The Industry Trends Program is reviewed by senior agency managers on an annual basis, and the staff reports the results to the Commission.

- Number of events with radiation exposures to the public and occupational workers from nuclear reactors that exceed Abnormal Occurrence Criteria I.A.

Reactor Safety Target: Zero

VERIFICATION:

Licensees report overexposures through the Sequence Coding and Search System (SCSS) LER database. The Oak Ridge National Laboratory maintains the database by receiving all LERs and coding them into the searchable database. The SCSS LER database is used to identify those

LERs that report overexposures. The NRC resident inspectors stationed at each nuclear power plant provide a high degree of assurance that plants do, in fact, report all events that meet reporting criteria. In addition, the NRC conducts inspections if there is any indication that an exposure exceeded, or could have exceeded, a regulatory limit. Finally, areas of the facility that may be subject to radiation contamination have monitors that record radiation levels. These monitors would immediately reveal any instances of high levels of radiation exposure.

VALIDATION:

Overexposure to radiation is a potential danger from the operation of nuclear power plants. Such exposure to radiation in excess of the applicable regulatory limits may potentially occur through either a nuclear accident or other malfunctions at the plant. Consequently, tracking the number of overexposures that occur at nuclear reactors is an important indicator of the degree to which safety is being maintained.

- Number of radiological releases to the environment from nuclear reactors that exceed applicable regulatory limits.

Reactor Safety Target: 0

VERIFICATION:

As with worker overexposures, licensees report environmental releases of radioactive materials that are in excess of regulations or license conditions through the SCSS LER database maintained at the Oak Ridge National Laboratory. The NRC uses the SCSS database to identify those LERs reporting releases and applies the number of reported releases to this measure. The NRC also conducts periodic inspections of licensees to ensure that they properly monitor and control releases to the environment through effluent pathways. In addition, onsite monitors record any instances in which the plant releases radiation into the environment. If the inspections or the monitors reveal any indication of an accident or an inadvertent release, the NRC conducts followup inspections.

VALIDATION:

The generation of nuclear power creates radioactive materials. Nuclear power plants release these radioactive materials into the environment in a strictly controlled manner. The NRC has established regulatory controls that limit the amount of radioactive material released and the resultant dose to members of the public. Because releases in excess of regulatory limits have the potential to endanger public safety and harm the environment, the NRC tracks all releases of radioactive materials. The NRC inspects every nuclear power plant for compliance with regulatory requirements and specific license conditions related to radioactive releases. If the licensee violates regulations or license conditions, the inspection program includes escalating enforcement actions based on the severity of the event.

This performance measure includes dose values that are classified as being as low as reasonably achievable (ALARA), contained in 10 CFR Part 50, Appendix I, "Numerical Guides for Design Objectives and Limiting Conditions for Operation to Meet the Criterion 'As Low as is Reasonably Achievable' for Radioactive Material in Light-Water-Cooled Nuclear Power Reactor Effluents," as well as the public dose limits contained in 10 CFR Part 20, "Standards for Protection Against Radiation." Because the performance measure includes ALARA values, which are not safety limits, and because Appendix I to 10 CFR Part 50 allows licensees to temporarily exceed, for good reason, the ALARA dose values, the performance measure is set to 2.

STRATEGIC GOAL 1 – SAFETY

Ensure Adequate Protection of Public Health and Safety and the Environment

NUCLEAR MATERIALS AND WASTE SAFETY

Strategic Outcomes:

- Prevent the occurrence of any inadvertent criticality events.
- Prevent the occurrence of any acute radiation exposures resulting in fatalities.

- Prevent the occurrence of any releases of radioactive materials that result in significant radiation exposures.
- Prevent the occurrence of any releases of radioactive materials that cause significant adverse environmental impacts.

VERIFICATION:

Prevent the occurrence of any inadvertent criticality events. Inadvertent criticality events must be reported, regardless of whether they result in exposures or injuries to workers or the public, and regardless of whether they result in adverse impacts to the environment. Licensees immediately report criticality events to the NRC Headquarters Operations Center by telephone through the cognizant licensee safety officer. The licensee must submit followup written reports to the NRC within 30 days of the initial report. The written report must contain specific information concerning the event, as specified by 10 CFR 70.50(c)(2) and 10 CFR 76.120(d)(2). The NRC then dispatches an inspection team to confirm the reliability of the data. The agency also tracks the event through the Nuclear Materials Event Database (NMED). The NRC would immediately investigate an event of this nature. Should an event meeting this threshold occur, it would be reported to the NRC through a number of sources but primarily through required licensee notifications. These events are summarized in event notifications and preliminary notifications, which are used to widely disseminate the information to internal and external stakeholders.

The fuel facilities, materials, high-level waste repository, decommissioning, and spent fuel storage and transportation inspection programs are key elements in verifying the completeness and accuracy of licensee reports. The integrated materials performance evaluation program (IMPEP) also provides a mechanism to verify that NRC regions are consistently and properly collecting and reporting events received from the licensees, and entering them into NMED.

The NRC has taken a number of steps to improve the timeliness and completeness of materials event data. These steps include assessment of the NMED data during monthly staff reviews, emphasis and analysis during the IMPEP reviews, NMED training in headquarters, the regions, and Agreement States, and discussions at all meetings of

Agreement States and of the conference of radiation control program directors (CRCPD).

VALIDATION:

Events collected under this strategic outcome are actual occurrences of accidental criticality. Such events could compromise public health and safety, the environment, and the common defense and security. Events of this magnitude are rare. If such an event occurred, it would result in prompt and thorough investigation to determine root causes, consequences, and actions that would mitigate the situation and prevent recurrence. Therefore, the strategic outcome of “no inadvertent criticalities” represents a valid measure of whether the NRC has ensured the adequate protection of public health and safety.

In assessing the validity of the data being collected as appropriate for the strategic outcome, the staff has determined that there is a logical relationship between the data collected and the strategic outcome. Given the magnitude and rarity of a criticality event, the NRC believes the probability that it would not be aware of an inadvertent criticality is very small.

VERIFICATION:

Prevent the occurrence of any acute radiation exposures resulting in fatalities. Determining whether or not a death resulted from acute radiation exposure is essential to the protection of public health and safety. Should an event meeting this threshold occur, it would be reported to the NRC, the Agreement State, or both through a number of sources but primarily through required licensee notifications. These events are summarized in event notifications and preliminary notifications, which are used to widely disseminate the information to internal and external stakeholders.

The fuel facilities, materials, high-level waste repository, decommissioning, and spent fuel storage and transportation inspection programs are key elements in verifying the completeness and accuracy of licensee reports. The IMPEP also provides a mechanism to verify that Agreement States and NRC regions are consistently collecting and reporting events received from the licensees, and entering them into NMED.

The NRC has taken a number of steps to improve the timeliness and completeness of materials event data. These steps include assessment of the NMED data during monthly staff reviews, emphasis and analysis during the IMPEP reviews, NMED training in headquarters, the regions, and Agreement States, and discussions at all Agreement States and conference of radiation control program directors (CRCPD) meetings.

VALIDATION:

The NRC had designed its regulatory process (including licensing, inspection, guidance, regulations, and enforcement activities) to ensure that there are no fatalities caused by acute radiation exposure. In the unlikely event that a death should occur, NRC or Agreement State technical specialists, with input from expert consultants, will decide whether the cause of a death is acute radiation exposure or exposure to other radioactive hazardous materials (for fuel cycle activities, this extends to other hazardous materials used with, or produced from, licensed material, consistent with 10 CFR Part 70, "Domestic Licensing of Special Nuclear Material").

NRC believes the data collected to meet this strategic outcome are free from bias. NRC does not use statistical sampling of data to determine results. Rather, the agency reviews all events data to determine if it has met the strategic outcome. Two important data limitations in determining this strategic outcome are (1) delay time for receiving information and (2) failure of NRC to become aware of an event that results in a fatality. To address the first limitation, NRC regulations and procedures associated with event reporting include specific requirements for timely notifications; however, there is a lag time separating the occurrence of an event and the known consequences of an event.

On the second limitation, the NRC believes the probability that it would not be aware of a fatality caused by acute radiation exposure is very small. Periodic licensee inspections and regulatory reporting requirements are sufficient to ensure that the agency would be aware of an event of this magnitude.

If such an event occurred, it would result in a prompt and thorough investigation of the event to determine its

root causes and consequences as well as actions that would mitigate the situation and prevent recurrence. In addition to these immediate actions, the NRC holds periodic meetings where staff and management review events that appear to meet this strategic outcome.

VERIFICATION:

Prevent the occurrence of any releases of radioactive materials that result in significant radiation exposures.

The NRC defines this strategic outcome as any discharge or dispersal of radioactive materials from the intended place of confinement, or discharge or dispersal of radioactive wastes during storage, transport, or disposal, which causes significant radiation exposures to a member of the public or an occupational worker. A significant radiation exposure is one that directly results in unintended permanent functional damage to an organ or physiological system, as determined by a physician, in accordance with AO Criterion I.A.3. (This metric does not include exposures from sealed sources. Exposure from sealed sources would be counted under the performance measure, "Number of events with radiation exposures to the public and occupational workers from radioactive material that exceed AO Criterion I.A.")

Should an event meeting this threshold occur, it would be reported to the NRC, the Agreement State, or both through a number of sources but primarily through required licensee notifications. These events are summarized in event notifications and preliminary notifications, which are used to widely disseminate the information to internal and external stakeholders. The NMED is an essential system for the NRC Office ... (NMSS) and Office... (FSME) to collect information on such events.

The fuel facilities, materials, high-level waste repository, decommissioning, and spent fuel storage and transportation inspection programs are key elements in verifying the completeness and accuracy of licensee reports. The IMPEP also provides a mechanism to verify that Agreement States and NRC regions are consistently collecting and reporting events received from the licensees, and entering them into NMED.

The NRC has taken a number of steps to improve the timeliness and completeness of materials event data. These steps include assessment of the NMED data during monthly staff reviews, emphasis and analysis during the IMPEP reviews, NMED training in headquarters, the regions and Agreement States, and discussions at all Agreement State and CRCPD meetings.

VALIDATION:

Significant radiation exposures are exposures that result in unintended permanent functional damage to an organ or a physiological system, as determined by a physician, in accordance with AO Criterion I.A.3. Events of this magnitude are rare. In the unlikely event that a significant exposure should occur, NRC or Agreement State technical specialists, with input from expert consultants, decide if the permanent functional damage is caused by conditions related to acute radiation exposures or exposure to other radioactive hazardous materials (for fuel cycle activities, this extends to other hazardous materials used with, or produced from, licensed material, consistent with consistent with 10 CFR Part 70, "Domestic Licensing of Special Nuclear Material").

NRC does not use statistical sampling of data to determine results. Rather, the agency reviews all event data to determine if the strategic outcome has been met. Two important data limitations in determining this strategic outcome are (1) delay time for receiving information and (2) failure of NRC to become aware of an event that results in a fatality. To address the first limitation, the NRC regulations and procedures associated with event reporting include specific requirements for timely notifications; however, there is a lag time separating the occurrence of an event and the known consequences of an event. On the second limitation, NRC believes the probability that it would not be aware of a fatality due to acute radiation exposure is very small. Periodic licensee inspections and regulatory reporting requirements are sufficient to ensure that the agency would be aware of an event of this magnitude.

If such an event occurred, it would result in a prompt and thorough investigation to determine root causes,

consequences, and actions that would mitigate the situation and prevent recurrence. In addition to these immediate actions, the NRC holds periodic meetings, where staff and management review events that appear to meet this strategic outcome.

VERIFICATION:

Prevent the occurrence of any releases of radioactive materials that cause significant adverse environmental impacts. Releases that have the potential to cause adverse environmental impact are currently undefined. As a surrogate, we will use any discharge or dispersal of radioactive materials from the intended place of confinement or discharge or dispersal of radioactive wastes during storage, transport, or disposal that exceeds the limits for reporting abnormal occurrences as given in Abnormal Occurrence Criterion 1.B.1.

Should an event meeting this threshold occur, it would be reported to the NRC, the Agreement State, or both through a number of sources but primarily through required licensee notifications. These events are summarized in event notifications and preliminary notifications, which are used to widely disseminate the information to internal and external stakeholders.

The fuel facilities, materials, high-level waste repository, decommissioning, and spent fuel storage and transportation inspection programs are key elements in verifying the completeness and accuracy of licensee reports. The IMPEP also provides a mechanism to verify that Agreement States and NRC regions are consistently collecting and report events received from the licensees and entering them into NMED.

The NRC has taken a number of steps to improve the timeliness and completeness of materials event data. These steps include assessment of the NMED data during monthly staff reviews, emphasis and analysis during the IMPEP reviews, NMED training in headquarters, the regions, and Agreement States, and discussions at all Agreement State and CRCPD meetings.

VALIDATION:

Releases that have the potential to cause an adverse environmental impact are those that exceed the limits for reporting abnormal occurrences as given by AO Criterion 1.B.1. The NRC has designed its regulatory process (including licensing, inspection, guidance, regulations, and enforcement activities) to ensure that there are no releases of radioactive materials that cause significant adverse environmental impacts.

Events of this magnitude are rare. In the unlikely event of a release of radioactive materials (for fuel cycle activities, this extends to other hazardous materials used with, or produced from, licensed material, consistent with 10 CFR Part 70), NRC and Agreement State technical experts, with possible input from expert consultants, decide whether the release caused a significant adverse environmental impact.

The NRC does not look at statistical sampling of data to determine results. Rather, the agency reviews all event data to determine if the strategic outcome has been met. Two important data limitations in determining this strategic outcome are (1) delay time for receiving information and (2) failure of NRC to become aware of an event that results in a fatality. To address the first limitation, NRC regulations and procedures associated with event reporting include specific requirements for timely notifications; however, there is a lag time separating the occurrence of an event and the known consequences of an event. On the second limitation, the NRC believes the probability that it would not be aware of a fatality caused by acute radiation exposure is very small. Periodic licensee inspections and regulatory reporting requirements are sufficient to ensure that the agency would be aware of an event of this magnitude.

If such an event occurred, the NRC would promptly investigate the event to determine its root causes, consequences, and actions that would mitigate the situation and prevent recurrence. In addition to these immediate actions, the NRC holds periodic meetings, where staff and management review events that appear to meet this strategic outcome.

Performance Measures:

- Number of events with radiation exposures to the public or occupational workers from radioactive material that exceed AO Criteria I.A.
Materials Safety Target: Less than or equal to 2
Waste Safety Target: Zero

VERIFICATION:

This performance measure includes any event involving licensed radioactive materials that results in significant radiation exposures to members of the public or occupational workers that exceed the dose limits of the AO reporting criteria. The NRC defines significant radiation exposure as exposure that results in unintended permanent functional damage to an organ or a physiological system, as determined by a physician, according to AO Criterion 1.A. However, this exempts some medical applications of radioactive materials that involve the intentional application of extremely high doses of radioactive materials.

Should an event meeting this threshold occur, it would be reported to the NRC, the Agreement State, or both through a number of sources, but primarily through required licensee notifications. These events are summarized in event notifications and preliminary notifications, which are used to widely disseminate the information to internal and external stakeholders.

The fuel facilities, materials, high-level waste repository, decommissioning, and spent fuel storage and transportation, inspection programs are key elements in verifying the completeness and accuracy of licensee reports. The IMPEP also provides a mechanism to verify that Agreement States and NRC regions consistently collect and report such events and enter them into NMED.

The NRC has taken a number of steps to improve the timeliness and completeness of materials event data. These steps include assessment of the NMED data during monthly staff reviews; emphasis and analysis during the IMPEP reviews; NMED training in headquarters, the regions, and Agreement States; and discussions at all Agreement State and CRCPD meetings.

VALIDATION:

There is a logical basis for using events involving radiation exposures that exceed AO Criteria I.A. as a performance measure for ensuring the protection of public health and safety. The NRC considers an event an abnormal occurrence if it significantly impacts public health or safety. The NRC has designed its regulatory process (including licensing, inspection, guidance, regulations, and enforcement activities) to mitigate the likelihood of an event that would exceed AO Criteria I.A.

Events of this magnitude are rare. In the unlikely event that an abnormal occurrence should occur, NRC or Agreement State technical specialists will confirm whether the criteria were met, with input provided by expert consultants, as necessary.

The NRC does not use statistical sampling of data to determine results. Rather, the agency reviews all event data to determine if the performance measure has been met. Two important data limitations in determining this strategic outcome are (1) delay time for receiving information and (2) failure of NRC to become aware of an event that results in a fatality. To address the first limitation, NMSS and FSME procedures and NRC regulations associated with event reporting include specific requirements for timely notifications; however, there is a lag time separating the occurrence of an event and the known consequences of an event.

On the second limitation, the probability of the NRC being unaware of a fatality caused by acute radiation exposure is very small. Periodic licensee inspections and regulatory reporting requirements are sufficient to ensure that the agency would be aware of an event of this magnitude. If such an event occurred, the NRC would promptly and thoroughly investigate the event to determine its root causes, consequences, and actions to mitigate the situation and prevent recurrence. In addition to these immediate actions, the NRC holds periodic meetings where staff and management validate the occurrence of these events.

- Number of radiological releases to the environment that exceed applicable regulatory limits.

Materials Safety Target: Less than or equal to 2

Waste Safety Target: Zero

VERIFICATION:

This performance measure is defined as a radiological release to the environment from any of the following activities: fuel facilities process and fabrication, nuclear materials licensing, high-level waste repository licensing, decommissioning, spent fuel storage and transportation, as well as other activities that exceed applicable regulations as defined in 10 CFR 20.2203(a)(3). A 30-day written report is required on such releases. The nuclear materials safety performance measure target is to have no more than five releases a year that meet these reporting criteria. The nuclear waste safety target is to have no releases that meet the reporting criteria.

Should an event meeting this threshold occur, it would be reported to the NRC, the Agreement State, or both through a number of sources but primarily through required licensee notifications. These events are summarized in event notifications and preliminary notifications, which are used to widely disseminate the information to internal and external stakeholders.

The fuel facilities, materials, high-level waste repository, decommissioning, and spent fuel storage and transportation inspection programs are key elements in verifying the completeness and accuracy of licensee reports. The IMPEP also provides a mechanism to verify that Agreement States and NRC regions are consistently collecting and reporting events received from the licensees and entering them into NMED.

The NRC has taken a number of steps to improve the timeliness and completeness of materials event data. These steps include assessment of the NMED data during monthly staff reviews; emphasis and analysis during the IMPEP reviews; NMED training in headquarters, the regions, and Agreement States; and discussions at all Agreement State and CRCPD meetings.

VALIDATION:

The regulations in 10 CFR Part 20 provide standards for protection against radiation. There is a logical basis for tracking releases subject to the 30-day reporting requirement under 10 CFR 20.2203(a)(3)(ii) as a performance measure for ensuring the protection of the environment. The NRC designed its regulatory process (including licensing, inspection, guidance, regulations, and enforcement activities) to ensure that releases of radioactive materials that exceed regulatory limits are infrequent.

In the unlikely event that a release to the environment exceeds regulatory limits, NRC or Agreement State technical specialists, with input from expert consultants, will confirm whether the criteria were met.

The NRC does not look at statistical sampling of data to determine results. Rather, the agency reviews all event data to determine if the strategic outcome has been met. Two important data limitations in determining this strategic outcome are (1) delay time for receiving information and (2) failure of NRC to become aware of an event that results in a fatality. To address the first limitation, NMSS and FSME procedures and NRC regulations associated with event reporting include specific requirements for timely notifications; however, there is a lag time separating the occurrence of an event and the known consequences of an event.

On the second limitation, it is unlikely that the NRC would be unaware of a fatality caused by acute radiation exposure. Periodic licensee inspections and regulatory reporting requirements are sufficient to ensure that the agency would be aware of an event of this magnitude.

If such an event occurred, the NRC would promptly investigate the event to determine its root causes, consequences, and actions that would mitigate the situation and prevent recurrence. In addition to these immediate actions, the NRC holds periodic meetings where staff and management review events that appear to meet this strategic outcome.

STRATEGIC GOAL 2 – SECURITY

Ensure the secure use and management of radioactive materials

Strategic Outcome:

- Prevent instances where licensed radioactive materials are used domestically in a manner hostile to the security of the United States.

Performance Measures:

- Unrecovered losses or thefts of risk-significant radioactive sources are 0.

Under AO Criterion I.C.1, the agency counts any unrecovered lost, stolen, or abandoned sources that exceed the values listed in 10 CFR Part 110, Appendix P, “Category 1 and 2 Radioactive Material.” Excluded from reporting under this criterion are events involving sources that are lost, stolen, or abandoned under the following conditions:

- (1) Sources abandoned in accordance with the requirements of 10 CFR 39.77(c).
- (2) Sealed sources contained in labeled, rugged source housing.
- (3) Recovered sources with sufficient indication that doses in excess of the reporting thresholds specified in AO Criteria I.A.1 and I.A.2 did not occur during the time the source was missing.
- (4) Unrecoverable sources lost under such conditions that doses in excess of the reporting thresholds specified in AO Criteria I.A.1 and I.A.2 were not known to have occurred.
- (5) Other sources that are lost or abandoned and declared unrecoverable; for which the agency has determined that the risk-significance of the source is low based on the location (e.g., water depth) or physical characteristics (e.g., half-life, housing) of the source and its surroundings; where all reasonable efforts have been made to recover the source; and where it has been determined that the source is not recoverable and would not be considered a realistic safety or security risk under this measure.

VERIFICATION:

Losses or thefts of radioactive materials that are greater than or equal to 1,000 times the quantity specified in 10 CFR Part 20, Appendix C, “Quantities of Licensed Material Requiring Labeling,” must be reported (following the guidelines of 10 CFR 20.2201(a)) by telephone to the NRC Headquarters Operations Center or Agreement State immediately (within 4 hours) if the licensee believes that an exposure could result to persons in unrestricted areas. If an event meeting the thresholds described above occurs, it would be reported through a number of sources but primarily through this required licensee notification. Events that are publicly available are then entered and tracked in NMED, which is an essential system used to collect and store information on such events. Separate methods are used to track events that are not publicly available. Additionally, licensees must meet the reporting and accounting requirements in 10 CFR Part 73, “Physical Protection of Plants and Materials,” and 10 CFR Part 74, “Material Control and Accounting of Special Nuclear Material.”

The NRC’s inspection programs are key elements in verifying the completeness and accuracy of licensee reports. The IMPEP also provides a mechanism to verify that Agreement States and NRC regions are consistently collecting and reporting events received from the licensees and are entering these events in NMED. In some cases, upon receiving a report, the NRC or Agreement State initiates an independent investigation that verifies the reliability of the reported information.

The regulation in 10 CFR 20.2201(b) requires a written report within 30 days for lost or stolen sources that are greater than or equal to 10 times the quantity specified in Appendix C to 10 CFR Part 20 if the source is still missing at that time. In addition, 10 CFR 20.2201(d) requires a second written report within 30 days of a licensee learning any additional substantive information. The NRC interprets this requirement as including reporting the recovery of sources.

The NRC issued guidance in the form of a regulatory issue summary (RIS 2005-21, “Clarification of the Report Requirements in 10 CFR 20.2201”) to clarify the current 10

CFR 20.2201(d) requirement for reporting the recovery of a risk-significant source. FSME will ask the Agreement States to send copies of the RIS (or equivalent document) to their licensees. The NRC issued the National Source Tracking System final rule in November 2006. Implementation of this system will create and maintain an inventory of risk-significant sources. This rulemaking codifies and clarifies reporting requirements for risk-significant sources (including reporting timeframes) by adding specific requirements to 10 CFR 20.2201, “Reports of Theft or Loss of Licensed Material,” for risk-significant sources, including a requirement for licensees to report the recovery of a risk-significant source within 30 days of recovery. In conjunction with this rulemaking, FSME will modify its Procedure SA-300 to specifically require Agreement States to report the recovery of a risk-significant source to the NRC Headquarters Operations Center immediately after being notified by a licensee.

VALIDATION:

Events collected under this performance measure are actual losses, thefts, or diversions of materials described above. Such events could compromise public health and safety, the environment, and the common defense and security. Events of this magnitude are expected to be rare. The information reported under 10 CFR Part 73 and 10 CFR Part 74 is required so that the NRC is aware of events that could endanger public health and safety or national security. Any failures at the level of the strategic plan would result in immediate investigation.

If an event subject to the reporting requirements described above occurs, the NRC would promptly and thoroughly investigate of the event to determine root causes, consequences, and actions to mitigate the situation and prevent recurrence.

- Number of substantiated cases of actual theft or diversion of licensed risk-significant radioactive sources or a formula quantity of special nuclear material or number of acts that result in radiological sabotage is 0.

VERIFICATION:

In AO Criterion I.C.2, a “substantiated” case means a situation that requires additional action by the agency or other proper authorities because of an indication of loss, theft, or unlawful diversion that cannot be refuted following an investigation. Such a situation might include an allegation of diversion, a report of lost or stolen material, a statistical processing difference, or other indication of loss of material control or accountability. Section 70.4, “Definitions,” of 10 CFR defines a “formula quantity of special nuclear material.” Radiological sabotage is defined in 10 CFR 73.2, “Definitions.” Within 1 hour of an occurrence, licensees subject to the requirements of 10 CFR Part 73 must call the NRC to report any breaches of security or other event that may potentially lead to theft or diversion of material or to sabotage at a nuclear facility. The NRC’s safeguards requirements are described in 10 CFR 73.71, “Reporting of Safeguards Events”; 10 CFR Part 73, Appendix G, “Reportable Safeguards Events”; and 10 CFR 74.11, “Reports of Loss or Theft or Attempted Theft or Unauthorized Production of Special Nuclear Material.” An information assessment team composed of NRC headquarters and regional staff members would immediately assess any significant events to determine further actions such as coordination with the intelligence community and law enforcement. In accordance with 10 CFR 73.71(d), the licensee must also file a written report within 60 days of the incident, describing the event and the steps that the licensee took to protect the nuclear facility. This information will enable the NRC to adequately assess whether radiological sabotage has occurred.

VALIDATION:

Events subject to reporting requirements are those that endanger the public health and safety and the environment through deliberate acts of theft or diversion of material or through sabotage directed against the nuclear facilities that the agency licenses. Events of this type are extremely rare. If such an event occurs, it would result in a prompt and thorough investigation of the event to determine root causes, consequences, and actions to mitigate the situation

and prevent recurrence. The investigation both ensures the validity of the information and assesses the significance of the event.

- Number of substantiated losses of a formula quantity of special nuclear material or substantiated inventory discrepancies of a formula quantity of special nuclear material that are judged to be significant relative to normally expected performance or regulatory limits and that are judged to be caused by theft or diversion or substantial breakdown of the accountability system is 0.

VERIFICATION:

Licensees must record events associated with AO Criterion I.C.3 within 24 hours of the identified event in a safeguards log maintained by the licensee. The licensee must retain the log as a record for 3 years after the last entry is made or until termination of the license. The NRC relies on its safeguards inspection program to ensure the reliability of recorded data. The NRC makes a determination of whether a substantiated breakdown has resulted in a vulnerability to radiological sabotage, theft, diversion, or unauthorized enrichment of special nuclear material. When making substantiated breakdown determinations, the NRC evaluates the materials event data to ensure that licensees are reporting and collecting the proper event data.

VALIDATION:

“Substantiated” means a situation that requires additional action by the agency or other proper authorities because of an indication of loss, theft, or unlawful diversion that cannot be refuted following an investigation. Such a situation may include an allegation of diversion, a report of lost or stolen material, a statistical processing difference, a system breakdown closely related to the material control and accounting program (such as an item control system associated with the licensee’s facility information technology system), or other indication of loss of material control or accountability. Section 70.4 of 10 CFR defines a formula quantity of special nuclear material. Events collected under

this performance measure may indicate a vulnerability to radiological sabotage, theft, diversion, or loss of special nuclear materials. Such events could compromise public health and safety, the environment, and the common defense and security. The NRC relies on its safeguards inspection program to help validate the reliability of recorded data and determine whether a breakdown of a physical protection or material control and accounting system has actually resulted in vulnerability.

- Number of substantial breakdowns of physical security or material control (i.e., access control containment or accountability systems) that significantly weaken the protection against theft, diversion, or sabotage is 0.

VERIFICATION:

AO Criterion I.C.4 defines “substantial breakdown” as a red finding in the security oversight program or significant performance problems and operational events resulting in a determination of overall unacceptable performance or in a shutdown condition (inimical to the effective functioning of the Nation’s critical infrastructure). Radiological sabotage is defined in 10 CFR 73.2. Immediately after a known occurrence, the NRC requires licensees to report any known breakdowns of physical security, based on the requirements in 10 CFR 73.71 and Appendix G to 10 CFR Part 73. If a licensee reports such an event, the headquarters operations officer prepares an official record of the initial event report. Upon notification of such an event, the NRC immediately begins responding with the activation of its information assessment team. A licensee must follow its initial telephone notification with a written report submitted to the NRC within 30 days.

The licensee maintains a safeguards log in which it records breakdowns of physical protection resulting in a vulnerability to radiological sabotage, theft, diversion, or loss of special nuclear materials or radioactive waste within 24 hours in a safeguards log maintained by the licensee. The licensee must retain the log as a record for 3 years after the last entry is made or until termination of the license. Licensees subject to 10 CFR Part 73 must also meet the reporting

requirements detailed in 10 CFR 73.71. The NRC evaluates all of the reported events, based on the criteria in 10 CFR 73.71 and Appendix G to 10 CFR Part 73. The NRC also maintains and relies on its safeguards inspection program to ensure the reliability of recorded and reported data.

VALIDATION:

Events assessed under this performance measure are those that threaten nuclear activities by deliberate acts, such as radiological sabotage, directed against facilities. If a licensee reports such an event, the information assessment team evaluates and validates the initial report and determines any further actions that may be necessary. Tracking breakdowns of physical security indicates whether the licensee is taking the necessary security precautions to protect the public, given the potential consequences of a nuclear accident attributable to sabotage or the inappropriate use of nuclear material either in this country or abroad.

Events collected under this performance measure may indicate a vulnerability to radiological sabotage, theft, diversion, or loss of special nuclear materials or radioactive waste. Such events could compromise public health and safety, the environment, and the common defense and security. The NRC relies on its safeguards inspection program to help validate the reliability of recorded data and determine whether a breakdown of a physical protection or material control and accounting system has actually resulted in a vulnerability.

- Number of significant unauthorized disclosures (loss, theft, or deliberate acts) of classified or safeguards information is 0.

VERIFICATION:

With regard to AO Criterion I.C.5, any alleged or suspected violations by NRC licensees of the Atomic Energy Act, Espionage Act, or other Federal statutes related to classified or safeguards information must be reported to the NRC under the requirements of 10 CFR 95.57(a) (for classified information), 10 CFR Part 73 (for safeguards

information), and NRC orders (for safeguards information subject to modified handling requirements). However, for performance reporting, the NRC would only count those disclosures or compromises that actually cause damage to the national security or to public health and safety. Such events would be reported to the cognizant security agency (i.e., the security agency with jurisdiction) and the regional administrator of the appropriate NRC regional office, as listed in Appendix A, “U.S. Nuclear Regulatory Commission Offices and Classified Mailing Addresses,” to 10 CFR Part 73. The regional administrator would then contact the Division of Security Operations at NRC headquarters, which would assess the violation and notify other NRC offices and other Government agencies, as appropriate. A determination would be made as to whether the compromise damaged the national security or public health and safety. The NRC would immediately investigate any unauthorized disclosures or compromises of classified or safeguards information that damaged the national security or public health and safety. In addition, NRC inspections will verify that licensees’ routine handling of classified and safeguards information (including safeguards information subject to modified handling requirements) conforms to established security information management requirements.

Any alleged or suspected violations of this performance measure by NRC employees, contractors, or other personnel would be reported in accordance with NRC procedures to the Director of Division of Facilities and Security at NRC headquarters. The NRC maintains a strong system of controls over national security and safeguards information, including (1) annual required training for all employees, (2) safe and secure document storage, and (3) physical access control in the form of guards and badged access.

VALIDATION:

Events collected under this performance measure are unauthorized disclosures of classified or safeguards information that damage the national security or public health and safety. Events of this magnitude are rare. If such an event occurs, the NRC would promptly investigate to

determine root causes, consequences, and actions to mitigate the situation and prevent recurrence. The NRC investigation teams also validate the materials event data to ensure that licensees are reporting and collecting the proper data.

ORGANIZATIONAL EXCELLENCE OBJECTIVE 1 – OPENNESS

Ensure openness in our regulatory process

Performance Measure:

- Percentage of selected openness output measures that achieve performance targets is equal to or greater than 88 percent.

VERIFICATION:

The NRC views nuclear regulation as the public’s business. Nuclear regulation should be transacted openly and candidly to maintain the public’s confidence. The goal to ensure openness explicitly recognizes that the public must be informed about, and have a reasonable opportunity to participate meaningfully in, the NRC’s regulatory processes. In assessing how the NRC will gauge its openness with its stakeholders, the NRC will (1) provide accurate and timely information to the public about the uses and risks of radioactive materials; (2) enhance the awareness of the NRC’s independent role in protecting public health and safety and the environment; (3) provide accurate and timely information about the safety performance of the licensees regulated by the NRC; (4) provide a fair and timely process to allow public involvement in NRC decisionmaking in matters not involving sensitive unclassified, safeguards, classified, or proprietary information; (5) provide a fair and timely process to allow authorized (appropriately cleared with a need to know) stakeholders to participate in NRC decisionmaking in matters involving sensitive unclassified, safeguards, classified, or proprietary information; and (6) obtain early public involvement on issues most likely to generate substantial interest and promote two-way communication to enhance public confidence in the NRC’s regulatory processes.

VALIDATION:

The NRC will measure overall actual performance by determining the percentage of the associated output measures that delivered their intended openness outcome. At a minimum, to meet the overall target, the agency must meet 8 percent of the output measure targets.

The process of collecting the data and making sure the information is complete, accurate, and consistent will be the responsibility of the individual office director who will review and approve the data submitted by staff.

**ORGANIZATIONAL EXCELLENCE
OBJECTIVE 2 – EFFECTIVENESS**

Ensure that NRC actions are effective, efficient, realistic, and timely

Performance Measures:

- The percentage of selected processes that deliver the desired efficiency improvement is greater than 70 percent. (The goal is greater than 90 by 2008).

VERIFICATION:

Initiatives such as the Government Performance and Results Act challenge Federal agencies to become more effective and efficient and to justify their budget requests with demonstrated program results. The drive to improve performance in Government, coupled with increasing demands on the NRC's finite resources, clearly indicates a need for the agency to become more effective and efficient. The NRC has established a performance measure to improve efficiency, which supports the two primary goals of safety and security and also addresses management excellence.

On an annual basis, candidate processes would be selected as part of this performance measure. For the purposes of this measure, the desired efficiency improvement of a process is defined as a positive change in its cost, quality, productivity, or timeliness. A desired efficiency improvement would be expressed as resource savings or cost avoidance for the agency or as a positive benefit to external stakeholders with respect to effectiveness, efficiency, or realism.

Offices will use the following process to identify and report on desired efficiency improvements:

- (1) Select and define a candidate process. Offices will identify processes at the beginning of each fiscal year that they will measure for desired efficiency improvement.
- (2) Analyze process for areas in need of improvement. This could include cost reduction, quality, timeliness, or other unique factors that can be measured for desired efficiency improvement.
- (3) Establish targets for efficiency improvements. Based on past experience and if previous trend data is available, offices will identify specific desired targets that they feel are challenging but achievable. The targets could involve improvements in cost, quality, productivity, or timeliness.
- (4) Report progress annually. Offices will report the actual data at the end of each fiscal year and may adjust the target accordingly, based on the results from previous years.

VALIDATION:

Overall actual performance will be measured by determining the percentage of the processes selected annually that delivered their intended desired efficiency improvement. At a minimum, the agency must achieve its target in 70 percent of the selected processes.

The process of collecting the data and ensuring the information is complete, accurate, and consistent will be the responsibility of the individual Office Director who will review and approve the data submitted by staff.

- No more than one instance per program where licensing or regulatory activities unnecessarily impede the safe and beneficial uses of radioactive materials.
Target: Reactor Program = 2 (1 in each Tier II program)
Materials/Waste Program = 5 (1 in each Tier II program)

VERIFICATION AND VALIDATION:

This measure is intended to serve as a precursor to the strategic-level outcome of “no significant licensing or

regulatory impediments to the safe and beneficial uses of radioactive materials.” The purpose of the measure is to provide an indication of overall agency performance with respect to the strategic objective of enabling the safe use of radioactive materials for beneficial civilian purposes.

The following table describes how the agency fulfills its role in enabling various phases of the business cycle:

Phase of Business Cycle	Intent of enabling in each category
Potential applicants	Provide an effective and efficient regulatory infrastructure so that this group is inclined to pursue licenses if they so choose. Ensure that the NRC is not a barrier to entry due to unnecessary regulatory burden.
Applicants	Provide stable and predictable processes so that applicants can enter the business in a timely fashion, only constrained by their ability to operate safely and securely (i.e., abide by NRC regulations).
Current licensees	Ensure that the regulation do not pose an unnecessary regulatory burden.

The key difference between this performance measure and the related strategic outcome is that the strategic outcome focuses on significant impediments, while the performance measure does not contain this qualifier. Thus, the performance measure is designed to capture lower-level instances where NRC programs may have unnecessarily created impediments. The following types of examples could count against this performance measure (and possibly against the strategic outcome as well, depending on severity):

- missing a key timeliness measure (e.g., for fuel-cycle licensing actions or reactor power updates) or milestone (e.g., termination of a license for complex decommissioning cases)

- failing to adjust the regulatory framework to support new technologies or otherwise respond to significant changes in the regulatory environment
- imposing an unnecessary regulatory burden on licensees or applicants to the extent that the NRC becomes a barrier to entry or sustainability

Efforts to risk inform regulatory programs, improve programmatic effectiveness and efficiency, and reduce unnecessary regulatory burden are all positive steps that can be taken to enable the safe use of radioactive materials.

Because the NRC does not have prior experience in applying this type of measure, the metric will likely require adjustment over the first few years. The intent is to set aggressive annual targets that reflect the agency’s commitment to continuous improvement. Consequently, it should be expected that some impediments will occur at the performance level due to resource limitations, emergent high-priority demands, or other circumstances beyond the control of program managers. Exceptions reported under this measure are considered in the agency’s assessment of the related strategic outcome.

ORGANIZATIONAL EXCELLENCE
OBJECTIVE 3 – OPERATIONAL EXCELLENCE

Ensure excellence in agency management to carry out the NRC’s strategic objective

Performance Measures:

- Percentage of selected NRC management programs reported by support offices to have delivered intended outcomes is equal to or greater than 80 percent.

VERIFICATION:

The NRC considered the management and support needed to achieve the agency’s mission, preexisting management challenges, and other initiatives. This goal includes strategies for the management of human capital, infrastructure management, improved financial

performance, expanded electronic government, budget and performance integration, and internal communications. The process of collecting the data and making sure the information is complete, accurate, and consistent will be the responsibility of the individual Office Director, who will review and approve the data submitted by staff.

VALIDATION:

Overall actual performance will be measured by determining the percentage of the four programs that delivered their intended management outcomes. At a minimum, to meet the overall target of 80 percent, all four programs must achieve an average score of 75 percent of the activity targets.

- The percentage of selected processes reported by support offices that deliver desired efficiency improvement is equal to or greater than 90 percent. (Goal is greater than 90 percent by 2008.)

VERIFICATION:

Initiatives such as the Government Performance and Results Act are challenging Federal agencies to become more effective and efficient and to justify their budget requests with demonstrated program results. The drive to improve performance in Government, coupled with increasing demands on the NRC's finite resources, clearly indicates a need for the agency to become more effective and efficient. The NRC has established a performance measure to improve efficiency, which supports the two primary goals of safety and security, and also addresses management excellence.

On an annual basis, the agency will select candidate processes as part of this performance measure. For the purposes of this measure, the desired efficiency improvement of a process is defined as a positive change in its cost, quality, productivity, or timeliness. Desired efficiency improvement would be expressed as resource savings or cost avoidance for the agency or as a positive benefit to external stakeholders with respect to effectiveness, efficiency, or realism.

Support offices will use the following process to identify and report on desired efficiency improvements:

- (1) Select and define a candidate process. Offices will identify processes at the beginning of each fiscal year that they will measure for desired efficiency improvement.
- (2) Analyze process for areas in need of improvement. This could include cost reduction, quality, timeliness, or other unique factors as appropriate that can be measured for desired efficiency improvement.
- (3) Establish targets for efficiency improvements. Based on past experience and if previous trend data is available, offices will identify specific desired targets that they feel are challenging but can be achieved. The target improvements could involve cost, quality, productivity, or timeliness.
- (4) Report progress annually. Offices will report the actual data at the end of each fiscal year and may adjust the target accordingly, based on the results from previous years.

VALIDATION:

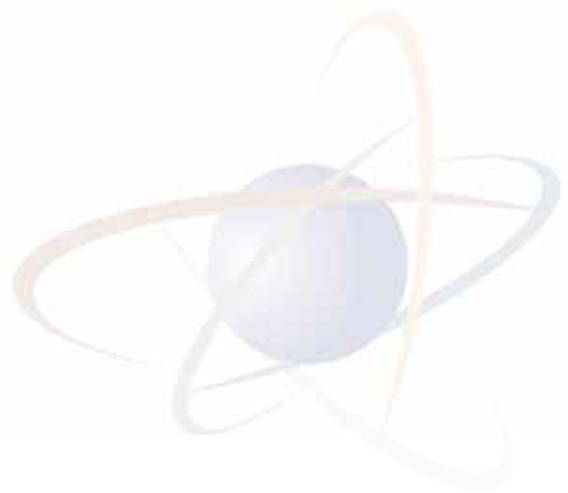
Overall actual performance will be measured by determining the percentage of the processes selected annually that delivered their intended desired efficiency improvement. At a minimum, 90 percent of the selected processes must have achieved their targets.

The process of collecting the data and ensuring the information is complete, accurate, and consistent will be the responsibility of the individual Office Director, who will review and approve the data submitted by staff.



Photo Courtesy of Progress Energy Corporation.

The Brunswick nuclear power plant, named for the county in which it is located, covers 4.86 sq km (1,200 acres). The site is adjacent to the town of Southport, NC, and to wetlands and woodlands.



APPENDIX E AGREEMENT STATES

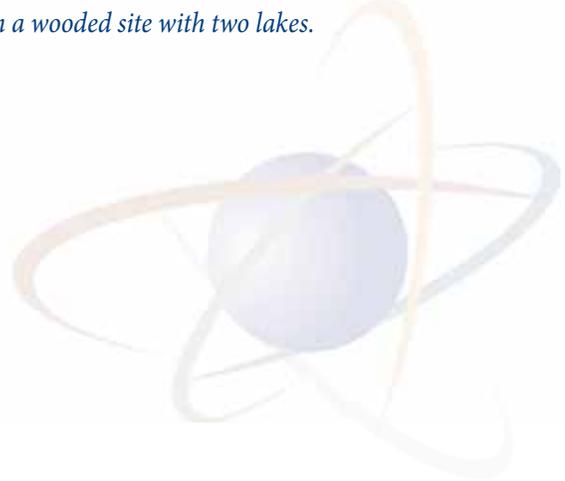
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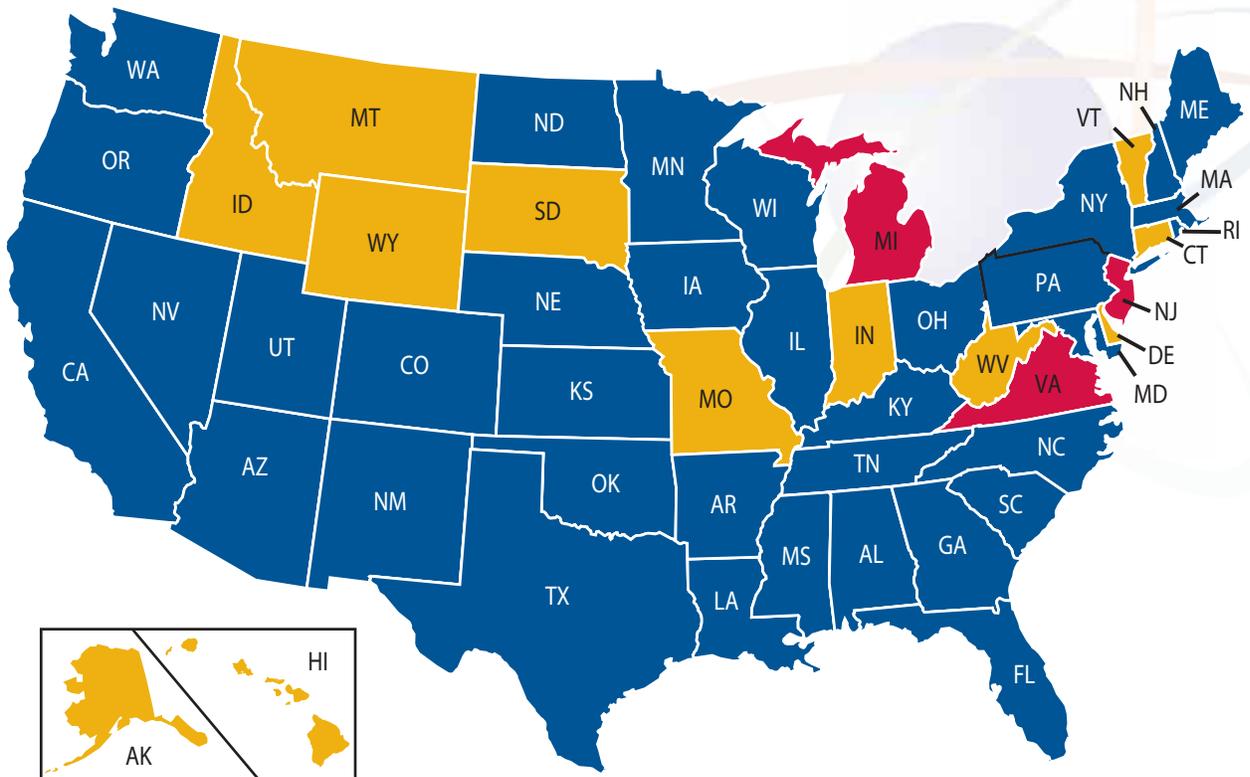


Photo Courtesy of the Entergy Corporation.

Grand Gulf nuclear power station uses a General Electric boiling-water reactor near Port Gibson, MS. The plant has a 156.5-meter (520-foot) cooling tower and is situated on a wooded site with two lakes.



AGREEMENT STATES (AS OF APRIL 2008)

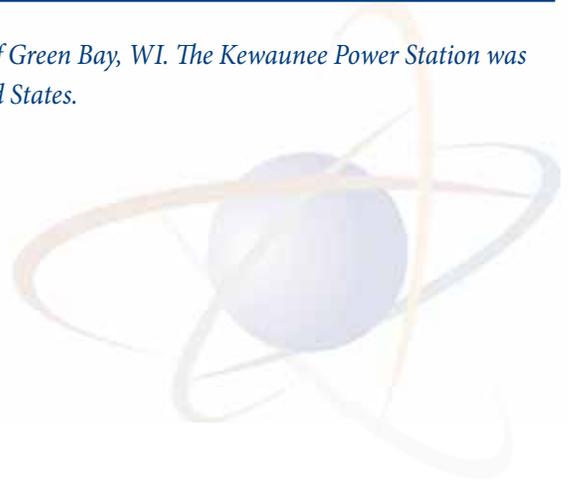


- Agreement States (35)
- NRC States (12)
- NRC States that have expressed intent to sign Agreement (3)



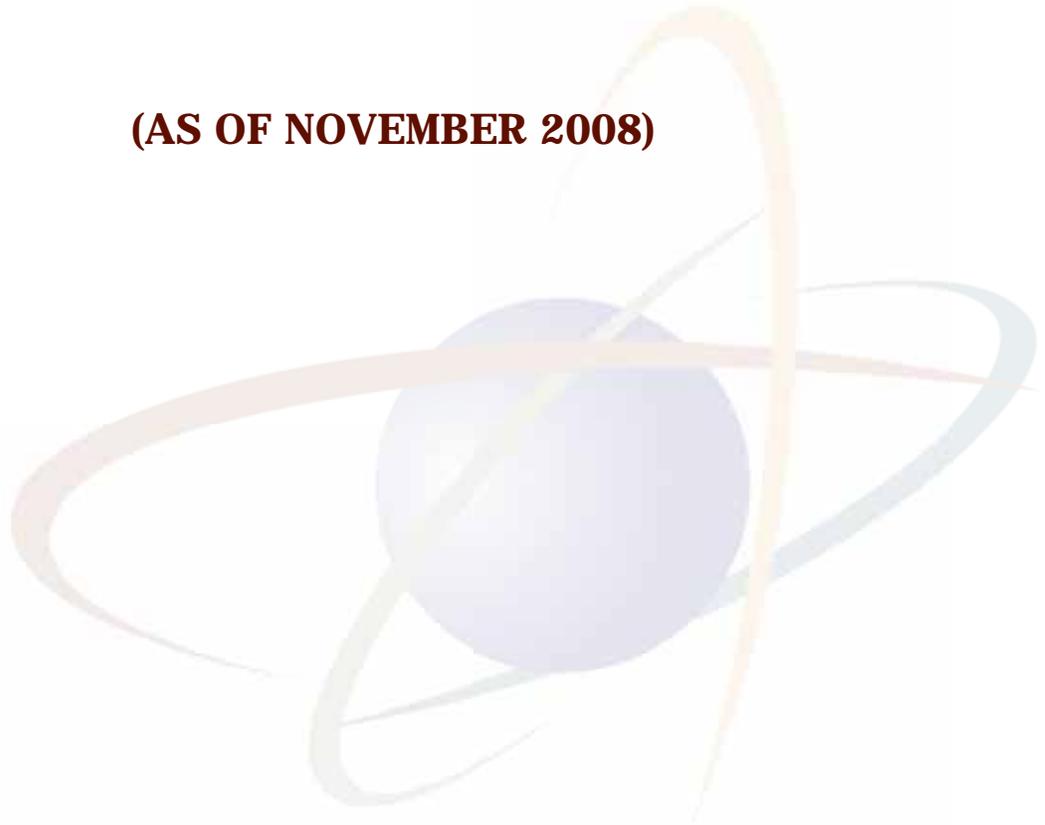
Photo Courtesy of the NRC Photo Library.

The Kewaunee Power Station in Carlton, WI, 43 km (27 miles) southeast of Green Bay, WI. The Kewaunee Power Station was the fourth nuclear plant built in Wisconsin and the 44th built in the United States.

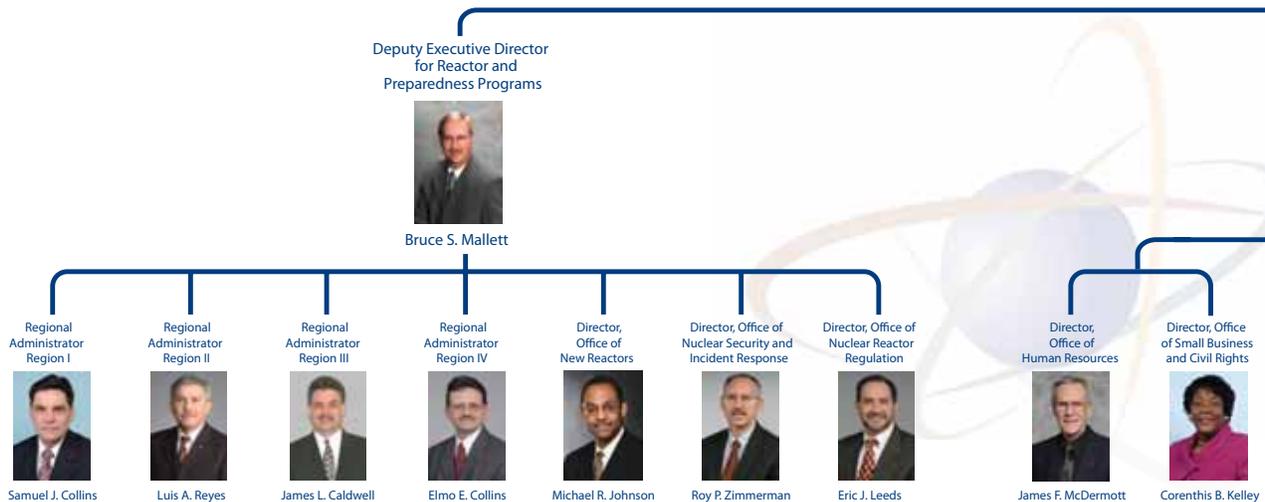
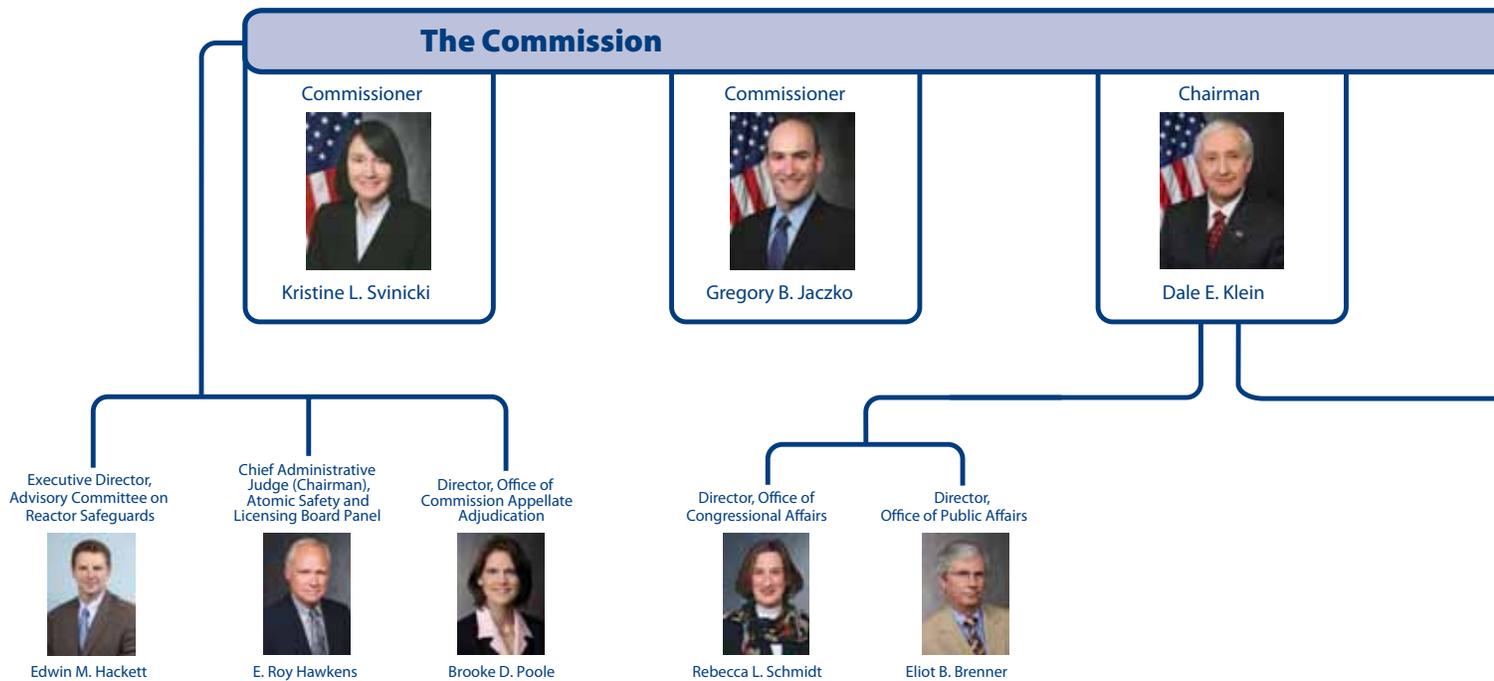


APPENDIX F NRC ORGANIZATIONAL CHART

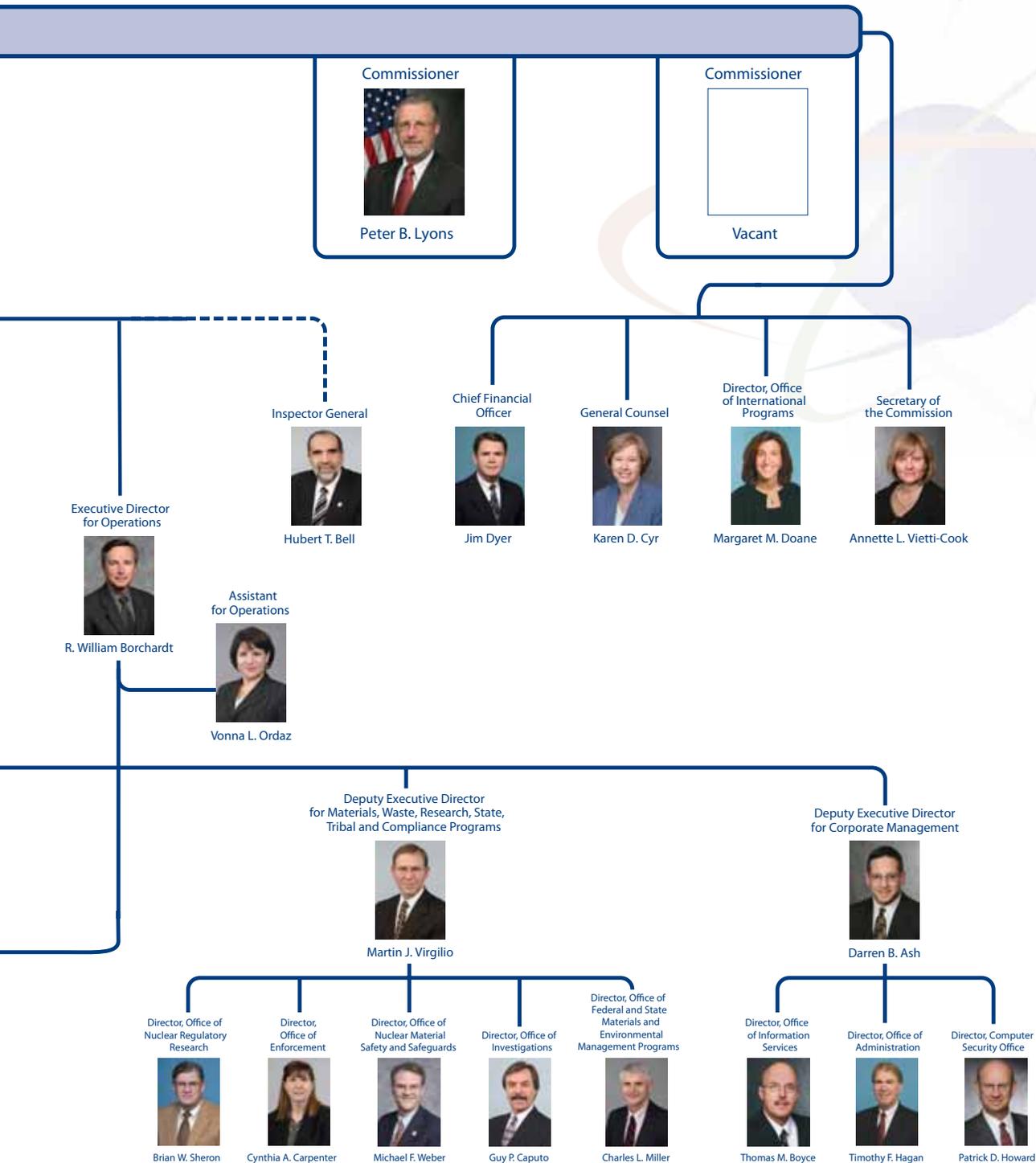
(AS OF NOVEMBER 2008)



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November 4, 2008



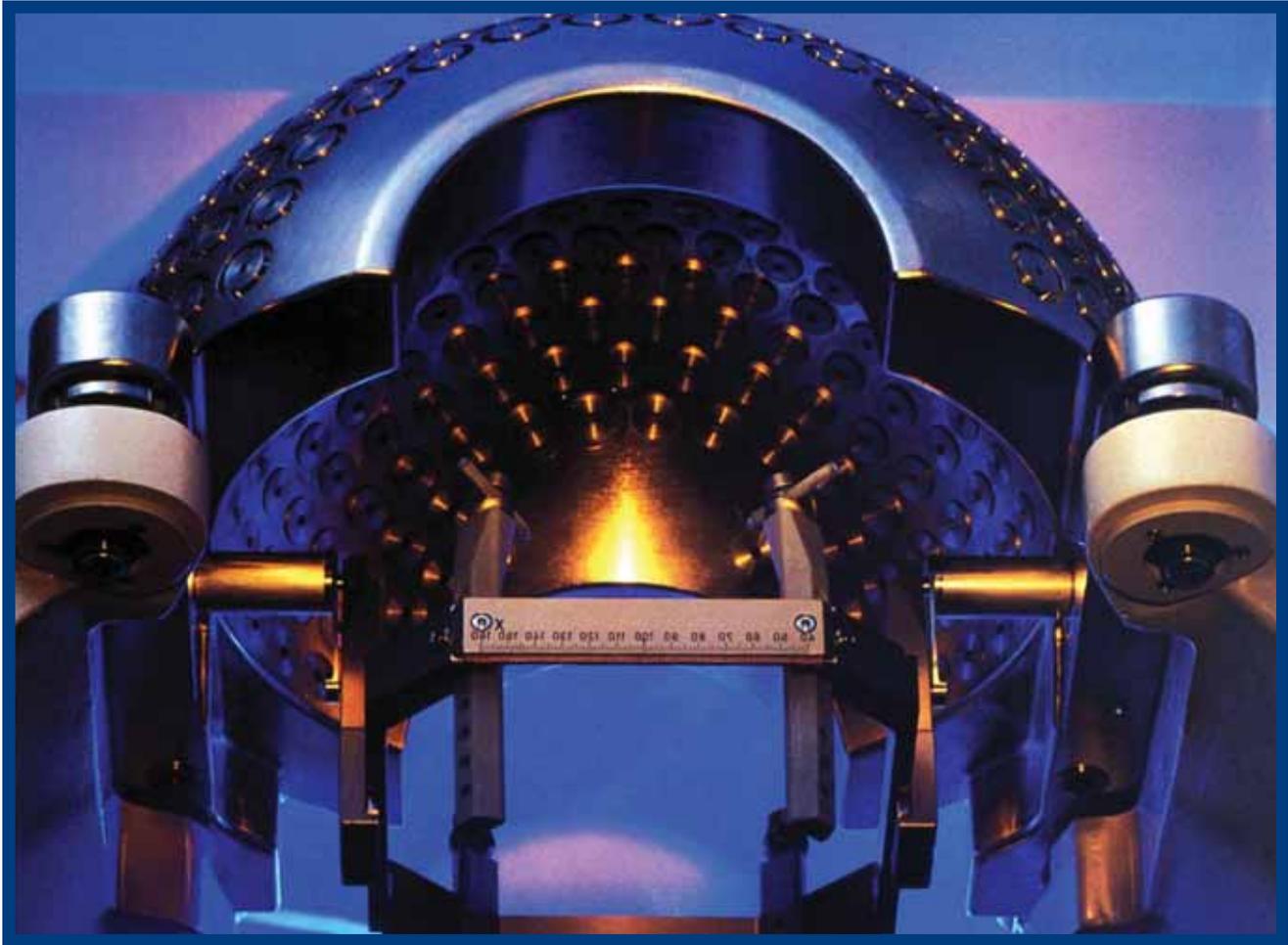


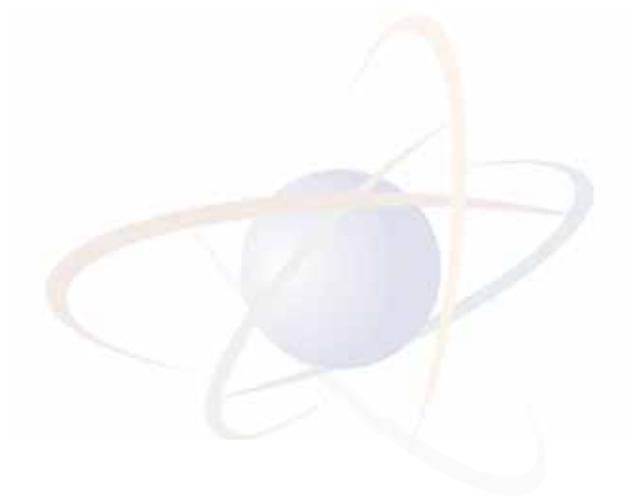
Photo Courtesy of Elekta.

Gamma Knife® device used for treating brain tumors with focused radiation beams.



APPENDIX G ACRONYMS AND ABBREVIATIONS





Acronym	
10 CFR	Title 10 of the <i>Code of Federal Regulations</i>
ACNW&M	Advisory Committee on Nuclear Waste and Materials
ADAMS	Agencywide Documents Access and Management System
AICOA	American Institute of Certified Public Accountants
ALARA	as low as reasonably achievable
ALC	agency location code
AO	abnormal occurrence
ASP	accident sequence precursor
C&A	certification and accreditation
CAROLFIRE	Cable Response to Live Fire
CCDP	conditional core damage probability
CFO	Chief Financial Officer
CFR	<i>Code of Federal Regulations</i>
COL	combined operating license
CRCPD	conference of radiation control program directors
CSO	Computer Security Office
CSRS	Civil Service Retirement System
CUI	controlled unclassified information
CWP	centralized work planning
CY	calendar year
DAA	designated approving authority
DBT	design basis threat
DFS	Division of Facilities and Security
DHS	U.S. Department of Homeland Security
DOE	U.S. Department of Energy
DOI-NBC	Department of the Interior National Business Center
DOL	U.S. Department of Labor
DOT	U.S. Department of Transportation
ECIC	Executive Committee on Internal Control

Acronym	
EDATS	Electronic Document and Action Tracking System
EDO	Executive Director for Operations
e-Gov	Federal Government's Electronic Government
EO	executive order
EPAct	Energy Policy Act of 2005
EPR	Evolutionary Power Reactor
EPRI	Electric Power Research Institute
ERIDS	Electronic Regulatory Information Distribution System
ESBWR	Economic Simplified Boiling-Water Reactor
ETUS	Enrichment Technology U.S., Inc.
FCFOP	Fuel Cycle Facility Oversight Program
FCNMED	Fuel Cycle Nuclear Material Event Database
FECA	Federal Employees Compensation Act
FERS	Federal Employees Retirement System
FFMIA	Federal Financial Management Improvement Act
FICA	Federal Insurance Contribution Act
FIPS	Federal Information Processing Standard
FISMA	Federal Information Security Management Act
FMFIA	Federal Managers Financial Integrity Act
FOIA	Freedom of Information Act
FPS	Federal Protective Service
FR	<i>Federal Register</i>
FTE	full-time equivalent
FY	fiscal year
GAAP	generally accepted accounting principles
GAO	U.S. Government Accountability Office

Acronym	
GEM	graphical evaluation module
GLTS	General License Tracking System
GPRA	Government Performance and Results Act
GSA	General Services Administration
HHS	U.S. Department of Health and Human Services
HSPD	Homeland Security Presidential Directive
IAEA	International Atomic Energy Agency
IATO	interim approval to operate
IG	Inspector General
IMPEP	integrated materials performance evaluation program
Improvement Act	Federal Financial Management Improvement Act
INL	Idaho National Laboratory
Integrity Act	Federal Managers Financial Integrity Act
IPAC	Intragovernmental Payment and Collection System
IPR	intellectual property rights
IPSS	Integrated Personnel Security System
ISA	integrated safety analysis
ISG	interim staff guidance
ISO	International Standards Organization
IT	information technology
ITAAC	inspections, tests, analyses, and acceptance criteria
KM	knowledge management
LER	licensee event report
LERSearch	Licensee Event Report Search System
LES	Louisiana Energy Services
MC	NRC Manual Chapter
MC&A	material control and accounting

Acronym	
MD	management directive
MDEP	Multinational Design Evaluation Program
MOC	memorandum of cooperation
NEA	Nuclear Energy Agency
NGNP	next generation nuclear plant
NIST	National Institute of Standards and Technology
NMED	Nuclear Materials Event Database
NMMSS	Nuclear Materials Management and Safeguards System
NMSS	Office of Nuclear Material Safety and Safeguards
NNSA	National Nuclear Security Administration of China
NRC	U.S. Nuclear Regulatory Commission
NRR	Office of Nuclear Reactor Regulation
NSIR	Office of Nuclear Security and Incident Response
NSTS	National Source Tracking System
NTEU	National Treasury Employees Union
NWF	Nuclear Waste Fund
OAR	official agency record
OBRA-90	The Omnibus Budget Reconciliation Act of 1990
OCM	Office of the Commission
OGC	Office of General Counsel
OHR	Office of Human Resources
OIG	Office of the Inspector General
OIS	Office of Information Services
OMB	Office of Management and Budget
OUO	official use only
PAR	Performance and Accountability Report

Acronym	
PART	Program Assessment Rating Tool
PATRAM 2007	The International Symposium on Packaging and Transportation of Radioactive Materials
PC	personal computer
PI	performance indicators
PII	personally identifiable information
PMM	project management methodology
POA&M	plan of action and milestones
PRA	probabilistic risk assessment
RDD	radiological dispersal device
RIS	regulatory issue summary
ROP	Reactor Oversight Process
SAPHIRE	Systems Analysis Program for Hands-On Integrated Reliability Evaluations
SCSS	Sequence Coding and Search System
SDP	significant determination process
SES	senior executive service
SFFAS	Statements of Federal Financial Accounting Standards
SGI	safeguards information
Silex	separation of isotopes by laser excitation
SNM	special nuclear material
SOARCA	State-of-the-Art Reactor Consequence Analyses
SPPP	Standard Practice Procedures Plan
SRS	Savannah River Site
SSP	(GLTA) System Security Plan
ST&E	security test and evaluation
SUNSI	sensitive unclassified, nonsafeguards information
T&L	time and labor

Acronym	
TAD	transportation, aging, and disposal
TSP	Thrift Savings Plan
UF₆	uranium hexafluoride
USAID	U.S. Agency for International Development
USAPWR	U.S. Advanced Pressurized-Water Reactor
USEC	United States Enrichment Corporation
USSGL	United States Standard General Ledger
V&V	verification and validation
VARANSAC	Vietnam Agency for Radiation and Nuclear Safety and Control

NRC FORM 335 (9-2004) NRCMD 3.7		U.S. NUCLEAR REGULATORY COMMISSION		1. REPORT NUMBER (Assigned by NRC, Add Vol., Supp., Rev., and Addendum Numbers, if any.) NUREG-1542, Vol. 14					
BIBLIOGRAPHIC DATA SHEET (See instructions on the reverse)									
2. TITLE AND SUBTITLE U.S. Nuclear Regulatory Commission Performance and Accountability Report FY 2008			3. DATE REPORT PUBLISHED <table border="1"> <tr> <td>MONTH</td> <td>YEAR</td> </tr> <tr> <td>November</td> <td>2008</td> </tr> </table>			MONTH	YEAR	November	2008
MONTH	YEAR								
November	2008								
5. AUTHOR(S) Richard Rough, et. al			4. FIN OR GRANT NUMBER n/a						
6. TYPE OF REPORT Annual			7. PERIOD COVERED (Inclusive Dates) FY 2008						
8. PERFORMING ORGANIZATION - NAME AND ADDRESS (If NRC, provide Division, Office or Region, U.S. Nuclear Regulatory Commission, and mailing address; if contractor, provide name and mailing address.) Resource Management and Support Staff Office of the Chief Financial Officer U.S. Nuclear Regulatory Commission Washington, DC 20555-0001									
9. SPONSORING ORGANIZATION - NAME AND ADDRESS (If NRC, type "Same as above"; if contractor, provide NRC Division, Office or Region, U.S. Nuclear Regulatory Commission, and mailing address.) Same as 8, above									
10. SUPPLEMENTARY NOTES									
11. ABSTRACT (200 words or less) The FY 2008 Performance and Accountability Report provides performance results and audited financial statements that enable Congress, the President, and the public to assess the performance of the agency in achieving its mission and stewardship of its resources. The report contains a concise overview, management's discussion and analysis, as well as performance and financial sections. Additional details of performance results and program evaluations can be found in the appendices.									
12. KEY WORDS/DESCRIPTORS (List words or phrases that will assist researchers in locating the report.) Performance and Accountability Report FY 2008 PAR				13. AVAILABILITY STATEMENT unlimited					
				14. SECURITY CLASSIFICATION (This Page) unclassified (This Report) unclassified					
				15. NUMBER OF PAGES					
				16. PRICE					

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NUREG-1542, Vol. 14
November 2008