



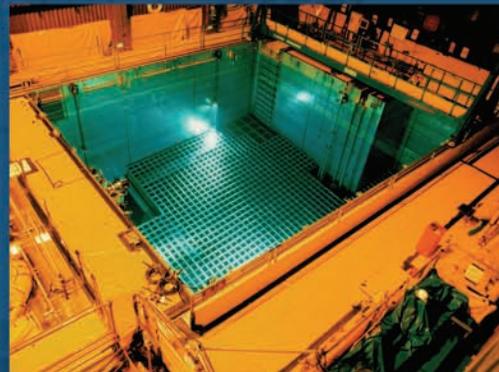
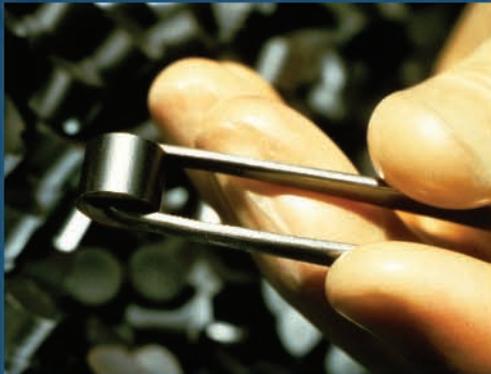
U.S. NRC

United States Nuclear Regulatory Commission

Protecting People and the Environment

Semiannual Report to Congress

October 1, 2008 – March 31, 2009



Office of the Inspector General

OIG VISION

“We are agents of positive change striving for continuous improvement in our agency’s management and program operations.”

NRC-OIG MISSION

NRC-OIG’s mission is to (1) independently and objectively conduct and supervise audits and investigations relating to NRC’s programs and operations; (2) prevent and detect fraud, waste, and abuse, and (3) promote economy, efficiency, and effectiveness in NRC’s programs and operations.

Cover photos (clockwise from top left): Fuel pellet, fuel assembly, reactor vessel head installation, spent fuel pool, spent fuel pool operations, storage and transport of spent fuel.

A MESSAGE FROM THE INSPECTOR GENERAL

I am pleased to present this *Semiannual Report to Congress* on the activities and accomplishments of the Nuclear Regulatory Commission (NRC) Office of the Inspector General (OIG) from October 1, 2008, to March 31, 2009.

Our work reflects the legislative mandate of the Inspector General Act, which is to identify and prevent fraud, waste, and abuse through the conduct of audits and investigations relating to NRC programs and operations. The audits and investigations highlighted in this report demonstrate our commitment to ensuring integrity and efficiency in NRC's programs and operations.



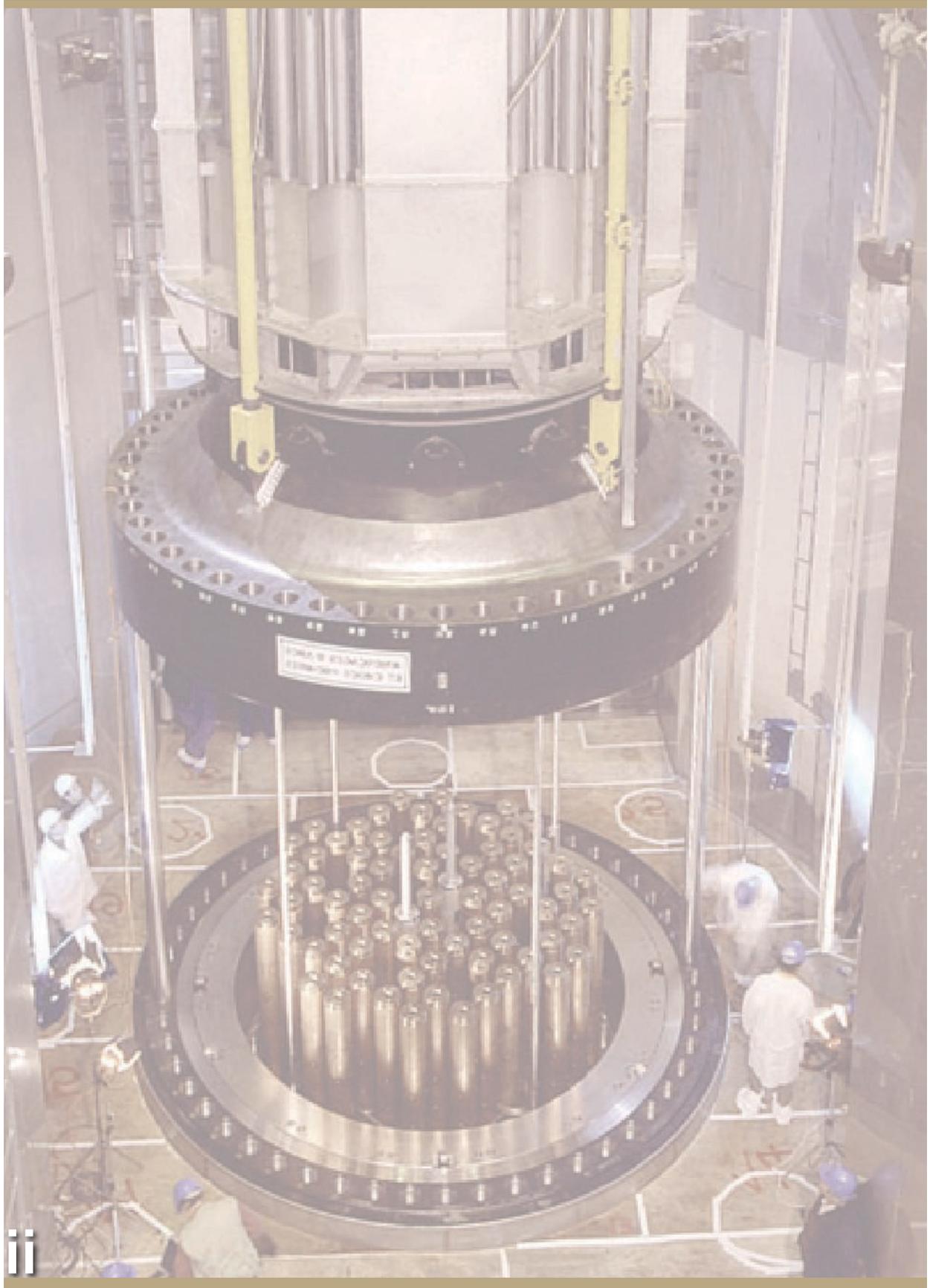
During this semiannual reporting period, we issued 9 program audit reports and 4 contract audit reports. As a result of this work, OIG made a number of recommendations to improve the effective and efficient operation of NRC's safety, security, and corporate management programs. OIG also opened 24 investigations, and completed 14 cases. Five of the open cases were referred to the Department of Justice, and 22 allegations were referred to NRC management for action. In addition, we referred 2 cases to State authorities.

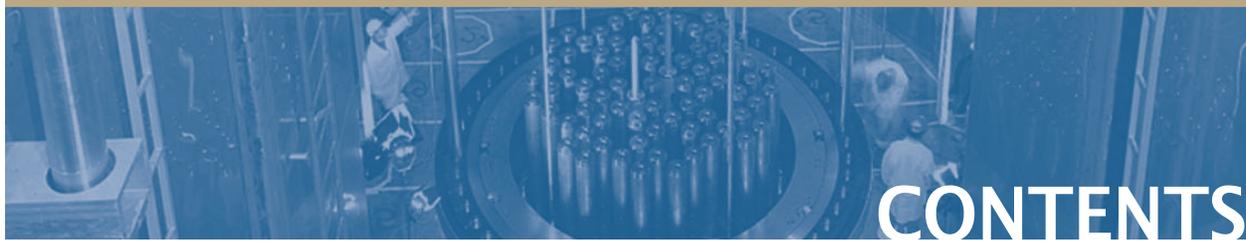
My office is dedicated to maintaining the highest possible standards of professionalism and quality in its audits and investigations. I would like to acknowledge our auditors, investigators, and support staff for their superior work and commitment to the mission of our office. I also want to congratulate the members of my audit and investigation staff who recently received awards issued by the President's Council on Integrity and Efficiency. These awards were received for the staff's noteworthy accomplishments in strengthening public health and safety and the environment, and increasing the economy, efficiency, and effectiveness with which NRC manages and exercises stewardship over its resources.

Finally, the success of the NRC OIG would not be possible without the collaborative work between my staff and agency managers to address OIG findings and to implement the corrective actions recommended by my office. I wish to thank these employees for their dedication and support, and I look forward to their continued cooperation as we work together to ensure the integrity of agency operations.

A handwritten signature in black ink that reads "Hubert T. Bell". The signature is written in a cursive, flowing style.

Hubert T. Bell
Inspector General

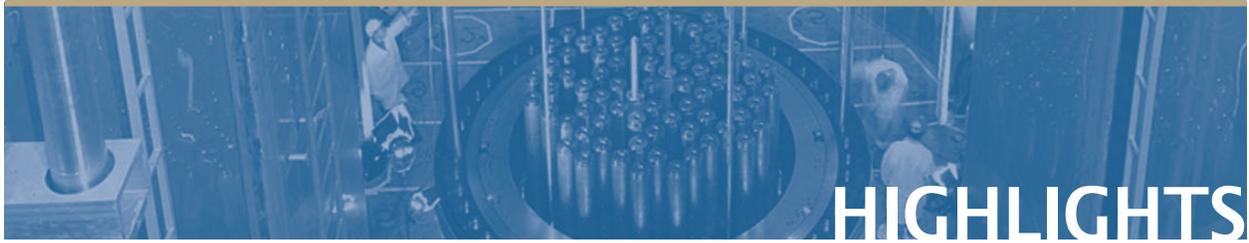




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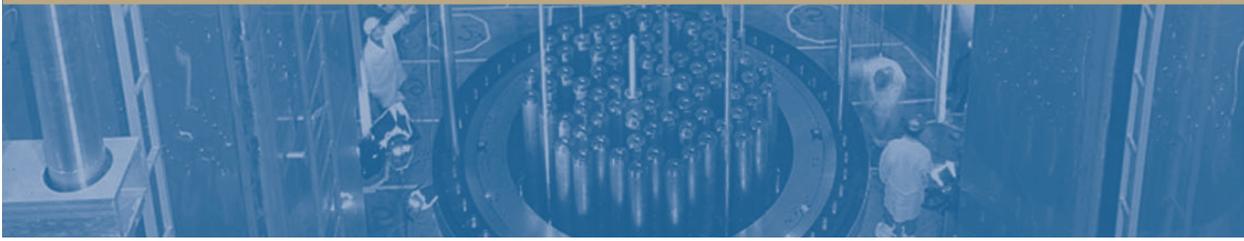




The following two sections highlight selected audits and investigations completed during this reporting period. More detailed summaries appear in subsequent sections of this report.

AUDITS

- The Chief Financial Officers Act requires OIG annually to audit NRC's principal financial statements. An independent public accounting firm conducted the audit with OIG oversight.
- The National Source Tracking System (NSTS) is an NRC initiative designed to allow Agreement State and Federal Government agencies to track transactions of specific types and quantities of radiological sealed sources. NRC awarded a contract worth approximately \$15 million in December 2005 for NSTS information system development, operational support, and maintenance. This contract included approximately \$3.1 million to fund information system development. The audit objective was to evaluate the agency's management of NSTS information system development and assess delays in the development process.
- NRC established its Committee to Review Generic Requirements (CRGR) in November 1981 to help ensure that proposed generic backfits to be imposed on NRC-licensees are appropriately justified based on NRC's regulations and backfit policy. Simplified, a backfit is a modification to a facility, or the procedures or organization required to operate the facility, due to a new or amended NRC regulation, rule, or interpretation. The objective of this audit was to determine if the CRGR adds value for the Executive Director for Operations' decisionmaking purposes and whether the committee's function is still needed.
- An Occupant Emergency Program (OEP) is defined as a short-term emergency response program that establishes procedures for safeguarding lives and property during emergencies. A fundamental part of an OEP is an occupant emergency plan containing a set of procedures to protect life and property in a specific federally occupied space under defined emergency conditions. Federal management regulations require every facility owned or leased by

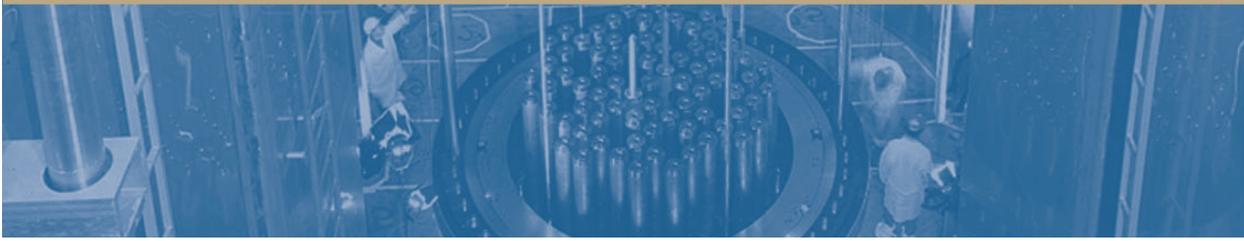


the Federal Government to have an occupant emergency plan. These regulations contain detailed information on how the plan should be developed and implemented. The audit objective was to evaluate the extent to which the agency's OEP complies with Federal regulations and standards.

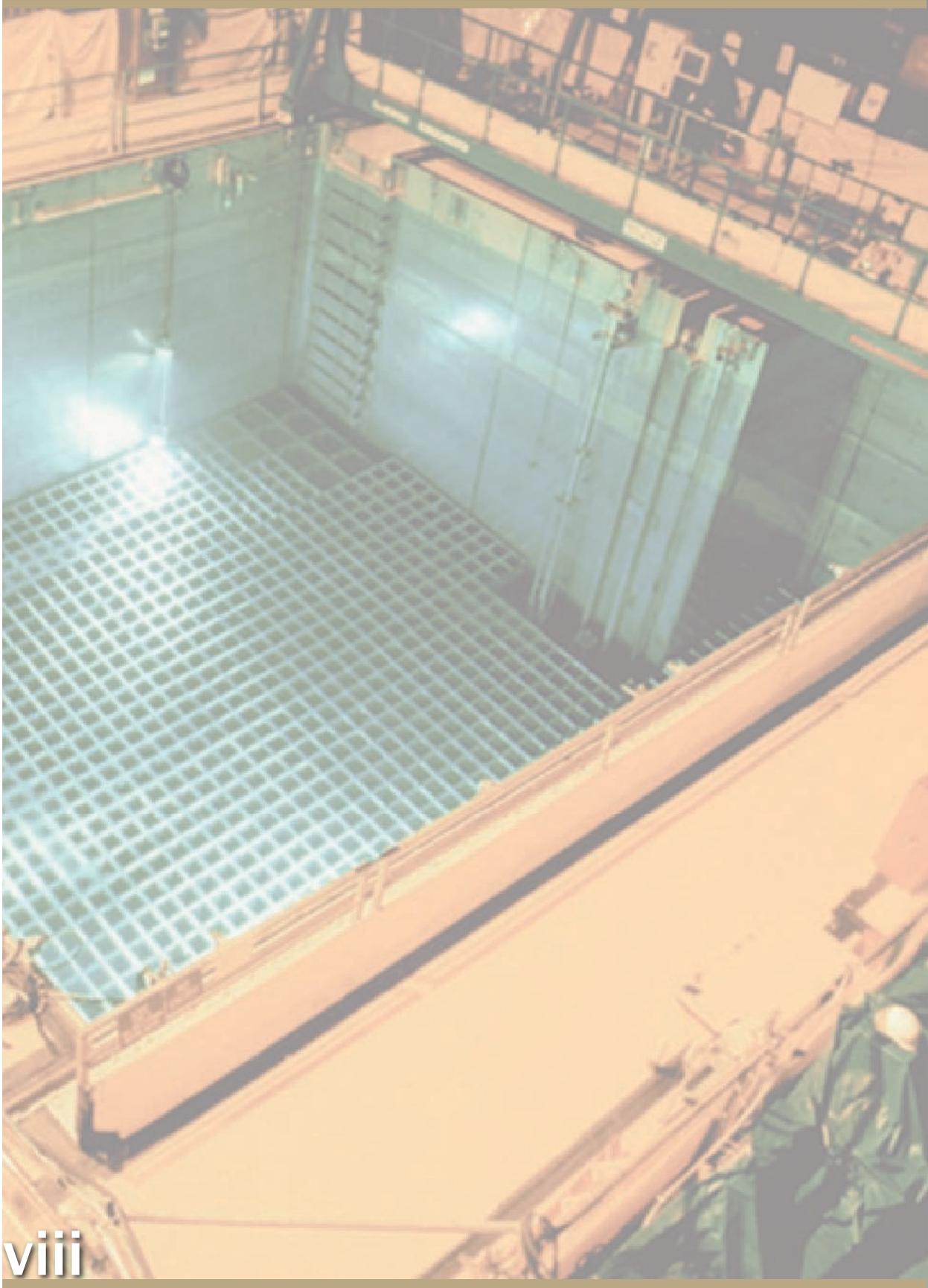
- In accordance with section 274 of the Atomic Energy Act, as amended, NRC may relinquish its authority to regulate byproduct, source, and limited quantities of special nuclear material to States. These States must first demonstrate that their regulatory programs are adequate to protect public health and safety and compatible with NRC's program. States that have entered into an agreement assuming this regulatory authority from NRC are called Agreement States. NRC has programmatic responsibility to periodically review the actions of the Agreement States to comply with the requirements of the Atomic Energy Act. The audit objective was to assess NRC's oversight of the adequacy and effectiveness of Agreement State programs.
- NRC maintains two warehouses, referred to as the main warehouse and the annex, located about a mile away from the agency's main headquarters buildings. These warehouses are used to receive, store, and deliver property, equipment, and supplies needed for NRC operations. The main warehouse also contains a security lockup cage used to store sensitive property. As of February 2009, the two warehouses contained almost 16,000 pieces of property and equipment with an initial acquisition cost of approximately \$5.1 million. The audit objective was to determine whether NRC has established and implemented an effective system of internal controls for maintaining accountability and control of agency property stored in the warehouses.

INVESTIGATIONS

- OIG completed an investigation into an allegation by a New Jersey resident concerning a counterfeit check that appeared to come from the NRC, which they received for items sold over the Internet.
- OIG completed an investigation involving an NRC contractor, Science Applications International Corporation, which violated the False Claims Act by not disclosing conflicts of interest.



- OIG conducted an investigation into an allegation made by a former NRC staff member who claimed that NRC management ignored safety concerns regarding a license application for a Mixed Oxide Fuel Fabrication Facility in Aiken, South Carolina. The former staff member alleged that NRC management did not ask the license applicant to clarify safety significant portions of their application.
- OIG completed an investigation into a 2007 allegation that there were irradiated gemstones, not regulated by NRC, widely available in the United States and that NRC did not know whether the gemstone radioactivity levels were within NRC regulatory limits. According to the allegation, these gemstones were available to the public even though the last NRC license for distributing irradiated gemstones had been terminated.



OVERVIEW OF THE NRC AND THE OIG

NRC'S MISSION

NRC was formed in 1975, in accordance with the Energy Reorganization Act of 1974, to regulate the various commercial and institutional uses of nuclear materials. The agency succeeded the Atomic Energy Commission, which previously had responsibility for both developing and regulating nuclear activities.

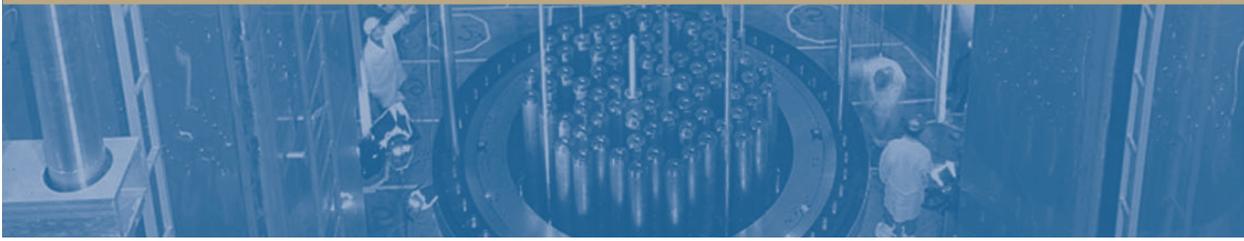
NRC's mission is to regulate the Nation's civilian use of byproduct, source, and special nuclear materials to ensure adequate protection of public health and safety, promote the common defense and security, and protect the environment. NRC's regulatory mission covers three main areas:

- **Reactors** - Commercial reactors that generate electric power and research and test reactors used for research, testing, and training.
- **Materials** - Uses of nuclear materials in medical, industrial, and academic settings and facilities that produce nuclear fuel.
- **Waste** - Transportation, storage, and disposal of nuclear materials and waste, and decommissioning of nuclear facilities from service.

Under its responsibility to protect public health and safety, NRC has three principal regulatory functions: (1) establish standards and regulations, (2) issue licenses for nuclear facilities and users of nuclear materials, and (3) inspect facilities and users of nuclear materials to ensure compliance with the requirements. These regulatory functions relate both to nuclear power plants and other uses of nuclear materials – like nuclear medicine programs at hospitals, academic activities at educational institutions, research, and such industrial applications as gauges and testing equipment.

The NRC maintains a current Web site and a public document room in Rockville, Maryland (NRC headquarters), and holds public hearings, public meetings in local areas and at NRC offices, and discussions with individuals and organizations.





OIG HISTORY, MISSION, AND GOALS

Inspector General History

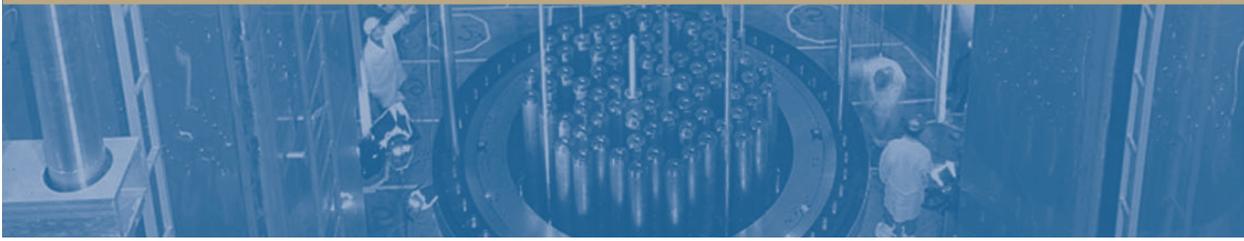
In the 1970s, Government scandals, oil shortages, and stories of corruption covered by newspapers, television, and radio stations took a toll on the American public's faith in its Government. The U.S. Congress knew it had to take action to restore the public's trust. It had to increase oversight of Federal programs and operations. It had to create a mechanism to evaluate the effectiveness of Government programs. And, it had to provide an independent voice for economy, efficiency, and effectiveness within the Federal Government that would earn and maintain the trust of the American people.

In response, President Jimmy Carter in 1978 signed into law the landmark legislation known as the Inspector General Act (IG Act). The IG Act created independent Inspectors General (IG), who would protect the integrity of Government; improve program efficiency and effectiveness; prevent and detect fraud, waste, and abuse in Federal agencies; and keep agency heads, Congress, and the American people fully and currently informed of the findings of IG work.

Today, the IG concept is a proven success. The IGs continue to deliver significant benefits to our Nation. Thanks to IG audits and inspections, billions of dollars have been returned to the Federal Government or have been better spent based on recommendations identified through those audits and inspections. IG investigations have also contributed to the prosecution of thousands of wrongdoers. In addition, the IG concept of good governance, accountability, and monetary recoveries encourages foreign governments to seek our advice, with the goal of replicating the basic IG principles in their own governments.

OIG Mission and Goals

NRC's OIG was established as a statutory entity on April 15, 1989, in accordance with the 1988 amendment to the IG Act. NRC OIG's mission is to (1) independently and objectively conduct and supervise audits and investigations relating to NRC programs and operations; (2) prevent and detect fraud, waste, and abuse; and (3) promote economy, efficiency, and effectiveness in NRC programs and operations.



OIG is committed to ensuring the integrity of NRC programs and operations. Developing an effective planning strategy is a critical aspect of accomplishing this commitment. Such planning ensures that audit and investigative resources are used effectively. To that end, OIG developed a Strategic Plan that includes the major challenges and critical risk areas facing NRC.

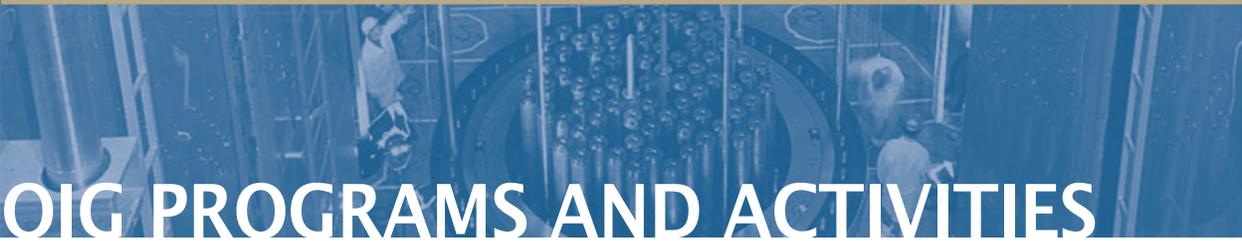
The plan identifies the priorities of OIG and establishes a shared set of expectations regarding the goals OIG expects to achieve and the strategies that will be employed to do so. OIG's Strategic Plan features three goals which generally align with NRC's mission and goals:



Courtesy of CPNPP

Comanche Peak Nuclear Power Plant

- 1. Strengthen NRC's efforts to protect public health and safety and the environment.**
- 2. Enhance NRC's efforts to increase security in response to an evolving threat environment.**
- 3. Increase the economy, efficiency, and effectiveness with which NRC manages and exercises stewardship over its resources.**



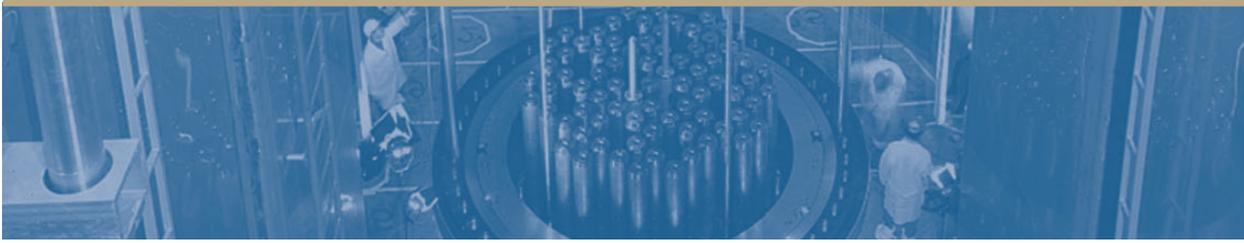
OIG PROGRAMS AND ACTIVITIES

Audit Program

The OIG Audit Program focuses on the agency's management and financial operations; economy or efficiency with which an organization, program, or function is managed; and whether the programs achieve intended results. OIG auditors assess the degree to which an organization complies with laws, regulations, and internal policies in carrying out programs, and they test program effectiveness as well as the accuracy and reliability of financial statements. The overall objective of an audit is to identify ways to enhance agency operations and promote greater economy and efficiency. Audits comprise four phases:

- **Survey phase** - An initial phase of the audit process is used to gather information, without detailed verification, on the agency's organization, programs, activities, and functions. An assessment of vulnerable areas determines whether further review is needed.
- **Verification phase** - Detailed information is obtained to verify findings and support conclusions and recommendations.
- **Reporting phase** - The auditors present the information, findings, conclusions, and recommendations that are supported by the evidence gathered during the survey and verification phases. Exit conferences are held with management officials to obtain their views on issues in the draft audit report. Comments from the exit conferences are presented in the published audit report, as appropriate. Formal written comments are included in their entirety as an appendix in the published audit report.
- **Resolution phase** - Positive change results from the resolution process in which management takes action to improve operations based on the recommendations in the published audit report. Management actions are monitored until final action is taken on all recommendations. When management and OIG cannot agree on the actions needed to correct a problem identified in an audit report, the issue can be taken to the Chairman for resolution.

Each September, OIG issues an Annual Plan that summarizes the audits planned for the coming Fiscal Year (FY). Unanticipated high priority issues may arise that generate audits not listed in the Annual Plan. OIG audit staff continually monitor specific issues areas to strengthen OIG's internal coordination and overall planning



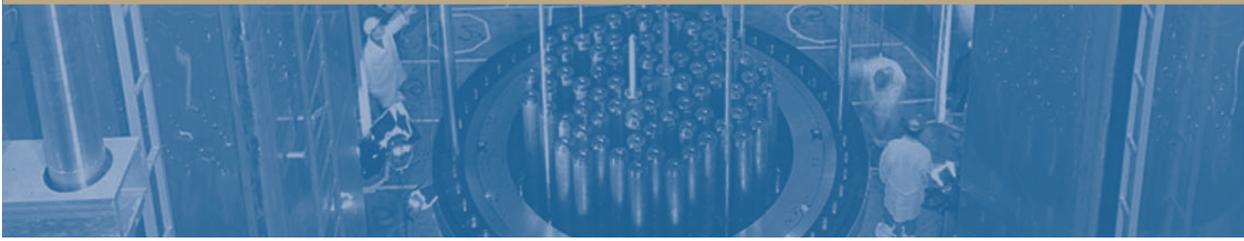
process. Under the OIG Issue Area Monitor (IAM) program, staff designated as IAMs are assigned responsibility for keeping abreast of major agency programs and activities. The broad IAM areas address nuclear reactors, nuclear materials, nuclear waste, international programs, security, information management, and financial management and administrative programs.

INVESTIGATIVE PROGRAM

OIG's responsibility for detecting and preventing fraud, waste, and abuse within NRC includes investigating possible violations of criminal statutes relating to NRC programs and activities, investigating misconduct by NRC employees, interfacing with the Department of Justice on OIG-related criminal matters, and coordinating investigations and other OIG initiatives with Federal, State, and local investigative agencies and other OIGs. Investigations may be initiated as a result of allegations or referrals from private citizens; licensee employees; NRC employees; Congress; other Federal, State, and local law enforcement agencies; OIG audits; the OIG Hotline; and IG initiatives directed at areas bearing a high potential for fraud, waste, and abuse.

Because NRC's mission is to protect public health and safety, a major focus area for the Investigation unit is investigations of alleged conduct by NRC staff that could adversely impact the agency's handling of matters related to health and safety. These investigations may include allegations of:

- Misconduct by high-ranking NRC officials and other NRC officials, such as managers and inspectors, whose positions directly impact public health and safety.
- Failure by NRC management to ensure that health and safety matters are appropriately addressed.
- Failure by NRC to appropriately transact nuclear regulation publicly and candidly and to openly seek and consider the public's input during the regulatory process.
- Conflict of interest by NRC employees with NRC contractors and licensees involving such matters as promises of future employment for favorable or inappropriate treatment and the acceptance of gratuities.



- Fraud in the NRC procurement program involving contractors violating Government contracting laws and rules.

OIG has also implemented a series of proactive initiatives designed to identify specific high-risk areas that are most vulnerable to fraud, waste, and abuse. A primary focus is electronic-related fraud in the business environment. OIG is committed to improving the security of this constantly changing electronic business environment by investigating unauthorized intrusions and computer-related fraud, and by conducting computer forensic examinations. Other proactive initiatives focus on determining instances of procurement fraud, theft of property, Government credit card abuse, and fraud in Federal programs.

GENERAL COUNSEL ACTIVITIES

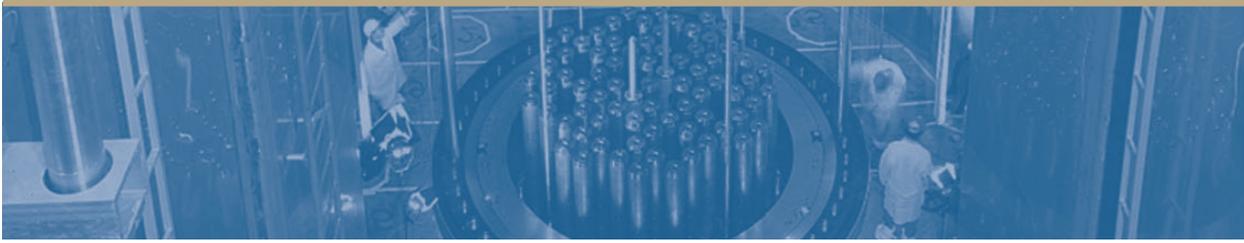
Regulatory Review

Pursuant to the Inspector General Act, 5 U.S.C. App. 3, Section 4(a)(2), OIG reviews existing and proposed legislation, regulations, policy, and implementing Management Directives (MD), and makes recommendations to the agency concerning their impact on the economy and efficiency of agency programs and operations.

It is important to emphasize that OIG comments in regulatory review are an objective analysis of the language of proposed agency statutes, directives, regulations and policies so as to identify vulnerabilities potentially resulting from these agency documents. Regulatory review is intended to provide assistance and guidance to the agency prior to the concurrence process so as to avoid formal implementation of potentially flawed documents. The OIG does not concur or object to the agency actions reflected in the regulatory documents but rather offers comments and requests responsive action within specified timeframes.

From October 1, 2008, through March 31, 2009, OIG reviewed more than 280 agency documents; including approximately 140 Commission papers (SECYs); Staff Requirements Memoranda; and 140 Federal Register Notices, regulatory actions, and statutes.

To effectively track the agency's response to OIG regulatory review comments, OIG requests written replies within 90 days, with either a substantive reply or status of issues raised by OIG.



During this reporting period, the agency update of its Ethics Management Directives was the focus of the most significant comments. These are summarized below:

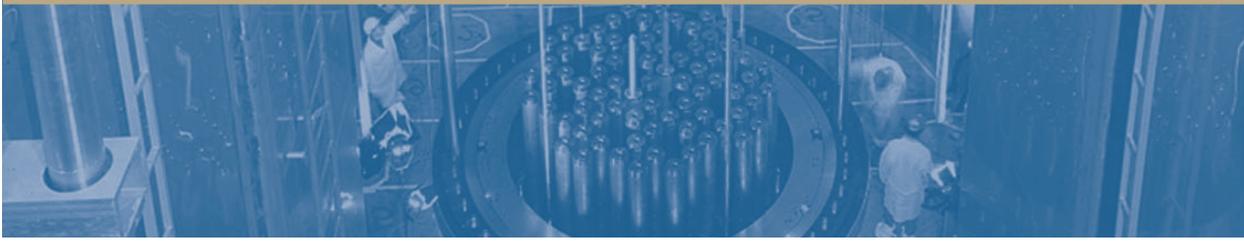
Ethics Management Directives

The NRC General Counsel serves as the Designated Agency Ethics Official for NRC and is responsible to provide advice and training to agency personnel on ethics issues, pursuant to ethics statutes and regulations, principally the Ethics in Government Act of 1978, Executive Order 12731, 5 U.S.C. Sections 7321-7326, 18 U.S.C. Sections 201-299, and 5 CFR Parts 2634-2641 and 5801. In fulfillment of that obligation, the General Counsel updated and revised eight MDs providing guidance to agency personnel on ethics and conflict of interest issues. OIG comments on six of the MDs are summarized below:

MD 7.3 - Participation in Professional Organizations. This directive describes agency policies and provides guidance to employees on their personal involvement with professional organizations, as well as their actions on behalf of the agency. It prescribes procedures for obtaining approval to engage in certain activities related to professional organizations and relevant ethics requirements. Review of the revised directive indicated that the Inspector General needed to be added as an authority to designate OIG representatives to professional organizations.

MD 7.5 - Ethics Counseling and Training. The purpose of this reference is to inform NRC employees of the availability of ethics counseling and to describe the elements of the NRC ethics training program. It also relates the procedures for developing an annual written plan for NRC ethics training. Procedures for identifying those employees who require ethics training and for tracking attendance of the trainees. OIG comments on this directive suggested that the Inspector General be added as an authority to identify OIG employees who have responsibilities that make it desirable for them to receive annual oral ethics briefings.

MD 7.6 - Public and Confidential Financial Disclosure Reports. The objective of this directive is to assist individuals who are required to file financial disclosure reports, to comply with the filing requirements. It describes the procedures for identifying filers and for distributing, collecting, reviewing, and maintaining custody of financial disclosure reports. Procedures are identified

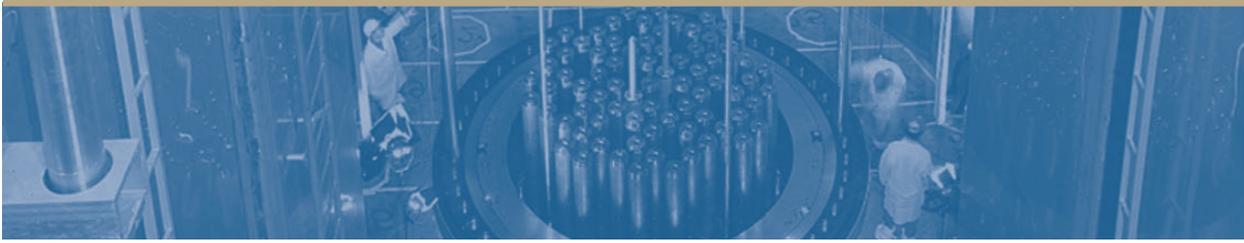


for use when remedial, administrative, or disciplinary actions are necessary due to conflicts of interest. Review of this directive also revealed the need for specific inclusion of the Inspector General as the designating authority for OIG employees to file financial disclosure reports.

MD 7.7 - Security Ownership. Employees who are subject to the security ownership restriction are identified in this directive. It also describes procedures for obtaining Certificates of Divestiture and exemption from the security ownership restriction. Procedures for certifying compliance with the security ownership rules are enumerated as well as those for identifying entities that are to be added to, or deleted from, the published list of prohibited securities. In addition to adding the Inspector General as the authority for designation of OIG employees subject to the stock restrictions, three employment categories were specified in the commentary.

MD 7.8 - Outside Employment. The purpose of this directive is to inform employees of outside employment that may be incompatible with their NRC employment and when prior approval to engage in outside employment is required. It also lists NRC officials who are authorized to grant approvals necessary for employees to engage in certain outside employment. In our comments, it was suggested that, in accord with practice, the Inspector General should be documented as the authority to approve outside employment in the case of OIG employees.

MD 7.9 - Ethics Approvals and Waivers. This directive addresses agency policy that NRC employees receive approval or a waiver before engaging in certain activities or accepting certain gifts or awards, in accordance with ethics statutes or regulations promulgated by the Office of Government Ethics (OGE). The directive describes NRC agency authority under OGE regulations to designate individuals who can act upon requests for approvals or waivers and specifies that all approvals or waivers must be in writing unless otherwise exempted in the directive. Criteria are provided in the directive to assure that agency officials use sound judgment in determining whether to grant a request for an approval or a waiver as well as the basis for discretion to deny a request, when warranted. The directive serves to inform employees when prior approval or a waiver is required, and which NRC officials have been delegated authority to grant the necessary approvals or waivers. The OIG comments focused on IG authority over OIG employees and matters within its purview.



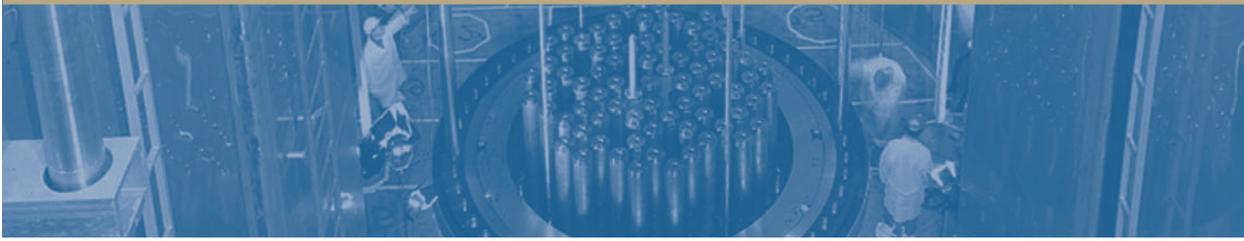
Also, the following comments were developed concerning two Management Directives and a Commission Paper.

MD 1.1 - NRC Management Directives System. This directive is intended to ensure that management directives in the agency system effectively communicate policies, objectives, responsibilities, authorities, requirements, guidance, and information to NRC employees. During this reporting period, the Handbook section of the Directive was amended in response to a Recommendation in OIG's "Audit of NRC Controls Over the Process for Eliminating Management Directives" (OIG-08-A-14). The amendment expanded the description of the MD elimination process. Follow up to this amendment confirmed response to OIG comments.

MD 3.16 - NRC Announcement Program. This directive is not yet published on the agency website, is intended to provide guidelines for use, approval, issuance and retention for agency-wide announcements, including urgent or time sensitive matters, issued under the NRC Announcement Program. It also provides guidelines and approval details for e-mail bulletins. Regulatory review comments identified the need for a provision for the approval of OIG related announcements by the Inspector General.

SECY Paper, "Deferral of Rulemaking: Expansion of National Source Tracking System (NSTS) (RIN 3150-A129). This document proposed to delay a final rule to include licensees who possess sealed sources containing greater than or equal to 1/10 of International Atomic Energy Agency, Category 3, thresholds. The OIG commented to convey concern that the proposal left an open-ended approach for continued study and analysis, which could unnecessarily delay finalization of the expansion rule. OIG provided two general observations related to the delay concern. The first is that the staff did not justify the need for additional study to adequately risk-inform the final rule. The second observation related that, although OIG agreed that the staff needs to closely observe data and systems performance of NSTS for Category 1 and 2 sources and make adjustments to the implementation as warranted, the staff failed to explain why deferral of the rule is necessary to observe system performance. As a result, the OIG found that there is insufficient information to support the delay.

In addition, the agency provided responsive comments to five earlier issued regulatory reviews and followed up with formal discussions on one of them.



OIG ACTIVITIES

Support of the Inspector General Community in Training

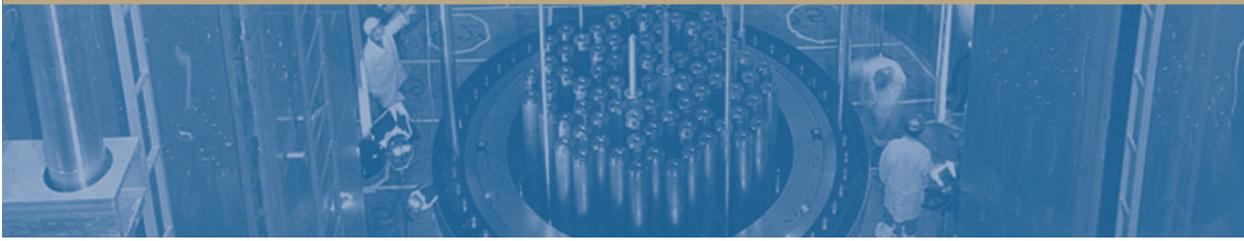
The OIG General Counsel supported the Inspector General community in training and presentations. The Attorney General guidelines for statutory law enforcement authority for 1811 special agents within the Inspector General community include a requirement for periodic training on specified legal issues. The Inspector General Criminal Investigator Academy was tasked with formulating the syllabus for the training and identification of appropriate teaching staff. The NRC OIG General Counsel was part of a group of attorneys from several Inspector General offices who constructed a model three hour course and participated in training a cadre of attorney-trainers. During this period, Ms. Grodin presented this course in January in San Diego, California and in March in Charleston, South Carolina, providing this mandatory training to almost 50 agents from more than a dozen Federal agencies.

OTHER ACTIVITIES

NRC OIG Receives PCIE Awards for Excellence

In 2008, the President's Council on Integrity and Efficiency and the Executive Council on Integrity and Efficiency (PCIE/ECIE) awarded an OIG Audit team and an OIG Investigations team the prestigious Award for Excellence.

- The audit team was recognized for exceptional performance in identifying weaknesses and recommending actions to improve Nuclear Regulatory Commission activities in evaluating applications for renewal of operating licenses at the country's commercial nuclear power plants. The team consisted of Catherine A. Colleli, Jaclyn H. Storch, Michael T. Cash, and Robert K. Wild.
- The investigation team was recognized for exceptional dedication, professionalism, and teamwork in investigating and reporting concerns pertaining to Hemyc fire barriers. The team consisted of George A. Mulley, Michael T. Cash, Rossana Raspa, and Thomas Barth.



PCIE Award for Excellence in Audit

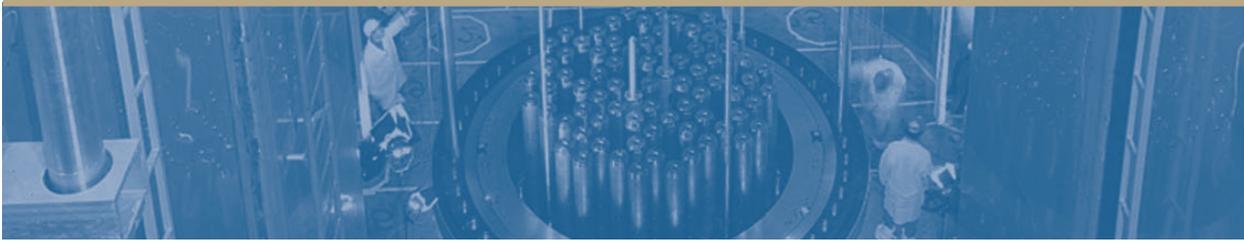
Federal regulations limit commercial power reactor licenses to an initial 40 year term but also permit such licenses to be renewed. This original 40-year term for reactor licenses was based on economic and antitrust considerations – not on limitations of nuclear technology. However, some structures and components may have been engineered on the basis of an expected 40-year service life. The timely renewal of licenses for an additional 20 years, as permitted, may be important to ensuring an adequate energy supply for the United States during the first half of the 21st century.

To evaluate aging effects on nuclear plant systems, structures, and components, NRC has established a license renewal process to assure safe plant operation for extended plant life. NRC permits licenses to be renewed if a licensee can demonstrate that its aging management programs are adequate and the plant can be safely operated for the extended term of the license. The audit team set out to determine the effectiveness of NRC's license renewal safety reviews that evaluate licensee applications for extended periods of operation. Although NRC developed a comprehensive process to evaluate applications for extended periods of operation, the audit team identified several areas where improvements would significantly enhance program operations.

The audit team's work represented a significant contribution to protecting public health, safety, and security by ensuring that the country's commercial nuclear power plants continue to operate safely.



The Nuclear Safety Audit Team receives its 2008 PCIE/ECIE Award for Excellence. Pictured left to right are Michael T. Cash, Technical Advisor; Stephen D. Dingbaum, Assistant Inspector General for Audits; Jaclyn H. Storch, Senior Management Analyst; Robert K. Wild, Audit Manager; Catherine A. Colleli, Audit Manager; Hubert T. Bell, Inspector General; and David C. Lee, Deputy Inspector General.



The Investigations Team receives its 2008 PCIE/ECIE Award for Excellence. Pictured left to right are Joseph A. McMillan, Assistant Inspector General for Investigations; Michael T. Cash, Technical Advisor; Hubert T. Bell, Inspector General; Rossana Raspa, Senior Level Assistant for Investigative Operations; and David C. Lee, Deputy Inspector General. Not pictured are Thomas M. Barth, Senior Criminal Investigator; and George A. Mulley, Jr., Senior Level Assistant for Investigative Operations.

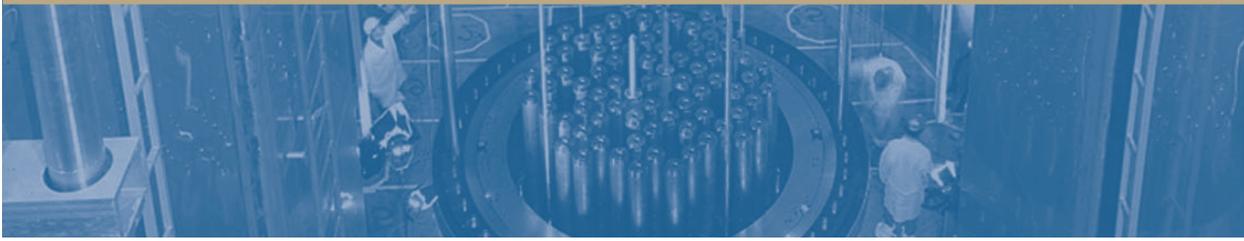
PCIE Award for Excellence in Investigation

Hemyc is a fire barrier that has been installed in operating nuclear power plants since the 1980s and is currently installed at 15 nuclear reactors in the United States. Recent concerns focused on Hemyc's failure to provide the level of protection expected for a 1-hour rated fire barrier during confirmatory testing sponsored by NRC in 2005. Additional concerns pertained to whether NRC staff was aware of problems with Hemyc prior to 2005 and whether the staff acted to address these problems.

NRC requires fire barrier manufacturers to conduct or sponsor tests that establish that their barriers meet either a 1-hour or 3-hour rating period. These time durations indicate the number of hours a fire barrier protects electric cables needed to shut down a nuclear power plant in the event of a fire. NRC does not conduct tests to qualify fire barriers for use in nuclear power plants but can conduct confirmatory testing to identify potential problems with the barriers.

The OIG team learned that 11 years after NRC approved Hemyc's installation in nuclear power plants, the agency in 1994 learned of problems with the material, which indicated that Hemyc had a measured endurance period of less than half of the expected 1-hour endurance period. The OIG team found that NRC did not communicate the results of the test to licensees, or conduct any follow-up to the test.

Further, the OIG team found that in November 1999, an NRC inspection identified potential problems with Hemyc fire barriers at the Shearon Harris Nuclear



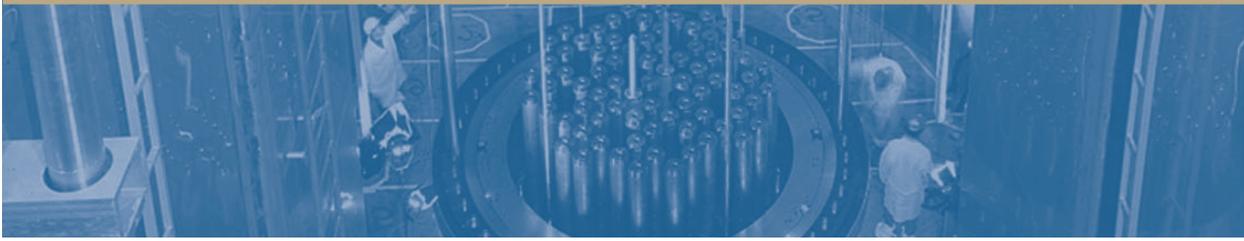
Power Plant. Consequently, in August 2000, NRC concluded that the information available from previous fire endurance tests proved inconclusive to qualify Hemyc as a 1-hour fire rated barrier. However, the OIG team found that NRC did not require licensees to take corrective action.

After August 2000, NRC initiated a program to perform NRC-sponsored confirmatory testing of the Hemyc fire barriers. The testing, which was not completed until 2005, resulted in a finding that the Hemyc fire barrier failed to perform for 1 hour as designed. However, the OIG team found that in April 2005, when NRC published the results of the tests in an NRC information notice to the nuclear industry, it did not require NRC licensees to take any action until a subsequent bulletin was issued in 2006.

The OIG team also found that NRC also was not timely in fulfilling a commitment to conduct assessments of all fire barriers used to protect electrical cables in nuclear power plants and to identify improvements needed to have these fire barriers meet NRC requirements made to Congress in March 1993 by a former NRC Chairman in testimony to the U.S. House of Representatives (Subcommittee on Oversight and Investigations).

This investigative work generated various results. Within several days of the report's issuance, the agency publicly agreed with the report's findings and issued a news release stating that staff were monitoring the Hemyc issue to ensure that nuclear power plants properly protect their safety related systems against fires and were reviewing the OIG report findings to determine how the agency could improve its performance in the future. The report also generated concern from Congress, and NRC responded with information on the various actions NRC had taken to provide oversight of fire protection and demonstrate to the public that it is being responsive and transparent.

The investigative team's work represents a significant contribution to improving NRC's performance in enhancing the safety of nuclear power plants, and thereby ensuring the safety and security of the American people.



Barry R. Snyder Joint PCIE/ECIE Award

The PCIE/ECIE also awarded members of the OIG Financial and Administrative Audit Team the prestigious Barry R. Snyder Joint PCIE/ECIE Award in recognition of their sustained contribution to the Financial Statement Audit Network to positively improve Federal financial management. NRC OIG award recipients were Anthony C. Lipuma, Steven E. Zane, Kathleen M. Stetson, Rebecca J. Underhill, and Robert L. Woodward.

The Financial and Administrative Audit Team receives its 2008 Barry R. Snyder Award. Pictured left to right are Anthony C. Lipuma, Deputy Assistant Inspector General for Audits; Robert L. Woodward, Senior Auditor; Rebecca J. Underhill, Senior Auditor; Stephen D. Dingbaum, Assistant Inspector General for Audits; Steven E. Zane, Team Leader; Hubert T. Bell, Inspector General; Kathleen M. Stetson, Audit Manager; and David C. Lee, Deputy Inspector General.

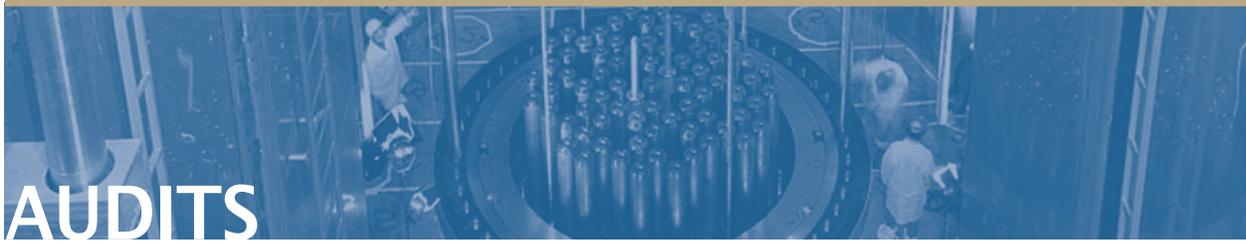


MANAGEMENT AND PERFORMANCE CHALLENGES

**Most Serious Management and Performance Challenges
Facing the Nuclear Regulatory Commission*
as of September 30, 2008
(as identified by the Inspector General)**

Challenge 1	<i>Protection of nuclear material used for civilian purposes.</i>
Challenge 2	<i>Managing information to balance security with openness and accountability.</i>
Challenge 3	<i>Implementation of a risk-informed and performance-based regulatory approach.</i>
Challenge 4	<i>Ability to modify regulatory processes to meet a changing environment, to include the licensing of new nuclear facilities.</i>
Challenge 5	<i>Oversight of radiological waste.</i>
Challenge 6	<i>Implementation of information technology and information security measures.</i>
Challenge 7	<i>Administration of all aspects of financial management.</i>
Challenge 8	<i>Managing human capital.</i>
<i>*The most serious management and performance challenges are not ranked in any order of importance.</i>	

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.



AUDITS

To help the agency improve its effectiveness and efficiency during this period, OIG completed 9 financial and performance audits or evaluations, 6 of which are summarized here that resulted in numerous recommendations to NRC management. OIG also analyzed 4 contract audit reports.

AUDIT SUMMARIES

Results of the Audit of the Nuclear Regulatory Commission's Financial Statements for Fiscal Year 2008

OIG STRATEGIC GOAL: CORPORATE MANAGEMENT

As required by the Chief Financial Officers Act of 1990, an audit of NRC's principal financial statements was conducted. In addition, the audit evaluated the effectiveness of internal controls over financial reporting and the agency's compliance with laws and regulations.

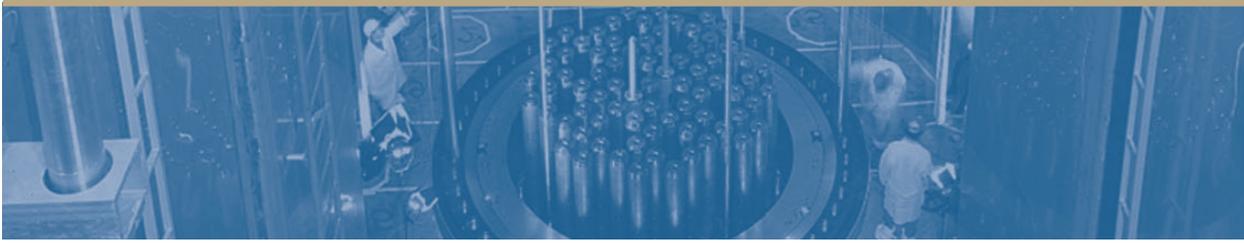
Audit Results:

Financial Statements

- The auditors expressed an unqualified opinion on the agency's Fiscal Year 2008 financial statements.

Internal Controls

- The auditors expressed an unqualified opinion on the agency's internal controls.
- The auditors cited as a significant deficiency NRC's lack of a business process to record accounts payable and related accrued expenses in the general ledger at the transaction level. NRC has implemented a new methodology to reduce the risk of misstatements in the recorded balance for non-Federal accounts payable; however, NRC has not fully documented its business processes and policies related to this methodology. In addition, NRC has not established historical relationships between the accrued accounts payable balances and unliquidated obligations in order to corroborate the results of this process.



Compliance with Laws and Regulations

- The auditors reported NRC's lack of a completed certification and accreditation (C&A) for the License Fee Billing System (FEES) as a substantial noncompliance with the Federal Financial Management Improvement Act. NRC is currently reevaluating its process for modernizing its financial management systems and has delayed the timeline for replacing FEES. Management intends to complete the C&A for the system by the end of the second quarter of Fiscal Year 2009. (*Addresses Management and Performance Challenge #7*)

Audit of National Source Tracking System Information System Development

OIG STRATEGIC GOAL: SECURITY

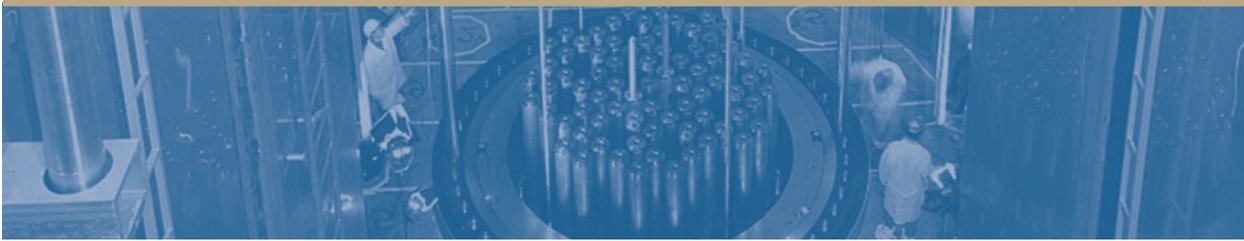
The National Source Tracking System (NSTS) is an NRC initiative designed to allow Agreement State¹ and Federal Government agencies to track transactions of specific types and quantities of radiological sealed sources.² This will include radiological sources held by the Department of Energy, and by NRC and Agreement State licensees. Licensees are businesses and other organizations licensed to possess radiological sources. Tracking capabilities will span the entire life cycle of each source, from manufacture or import to receipt and transfer, ending with export, decay, or burial.

NRC awarded a contract worth approximately \$15 million in December 2005 for NSTS information system development, operational support, and maintenance.

The audit objective was to evaluate the agency's management of NSTS information system development and assess delays in the development process.

¹ The Atomic Energy Act of 1954 allows NRC to delegate to State governments some authority to license and regulate radiological materials. States that have signed formal regulatory agreements with NRC are known as "Agreement States."

² Radioactive material may be in the form of a sealed source, which is the term used to describe radioactive material that is permanently sealed in a capsule or closely bonded in a solid form. This report refers to radiological sealed sources as "radiological sources."



Audit Results:

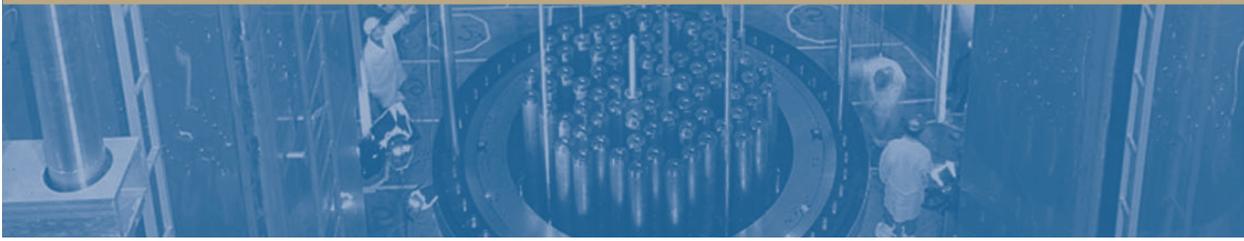
NRC had planned to develop the NSTS information system so that licensees could begin reporting radiological source data in November 2007. However, NRC's contractor did not complete system development work on schedule. With key system design issues unresolved, NRC modified the baseline contract to increase funds for development tasks by approximately \$2.8 million, an increase of nearly 90 percent over the initial development task cost ceiling of \$3.1 million. In addition, NRC postponed system deployment to December 2008 and revised the licensee reporting deadline to January 2009. System development delays resulted from a lack of clear policies and procedures for review of key system security documentation and for coordinating efforts among internal stakeholders. Technological, organizational, and staffing issues were additional factors cited by NRC staff. Agency officials have considered development of the NSTS information system a top agency priority project for improving accountability of radiological sources. However, delays in system development raise concerns about NRC's management of future information systems, particularly since NRC is planning two systems to complement NSTS. (*Addresses Management and Performance Challenges #1, #2, and #6*)

Audit of the Committee to Review Generic Requirements

OIG STRATEGIC GOAL: SAFETY

NRC established its Committee to Review Generic Requirements (CRGR) to help ensure that generic backfits imposed on NRC-licensees are appropriately justified based on NRC's regulations and backfit policy. Simplified, a backfit is a modification to a facility, or the procedures or organization required to operate the facility, due to a new or amended NRC regulation, rule, or interpretation. NRC considers backfitting as an inherent part of its regulatory process. According to agency guidance documents, for sound and effective regulation it is important that backfitting be conducted by a controlled and defined process.

In October 1981, the presiding NRC Chairman identified a need to better control the number and nature of backfit requirements imposed by NRC on its licensees. The Chairman further stipulated that a single, central point of control at NRC's highest operating level of management was needed, and in November 1981, NRC established the CRGR as its central backfit control. The CRGR's key implementing

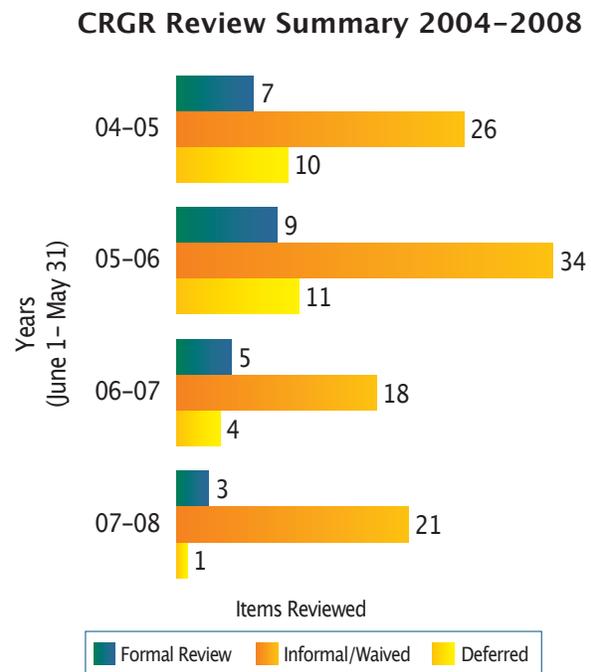


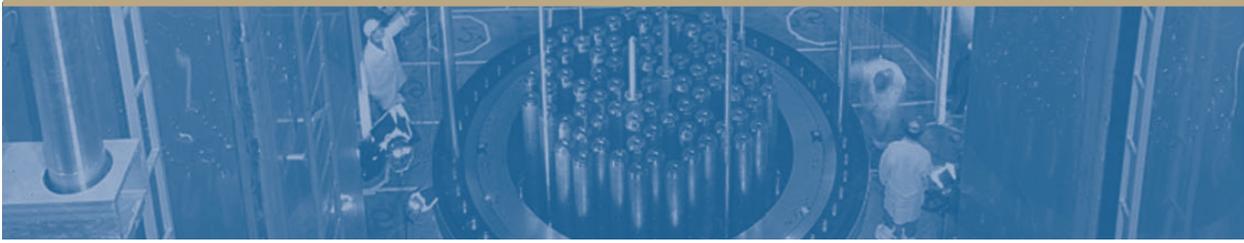
procedure for conducting generic backfit reviews is its Charter. The CRGR’s mission, as identified in the Charter, includes ensuring that unintended backfits are not imposed or implied by proposed new or revised generic requirements for NRC-licensed power reactors and nuclear materials facilities, and that NRC-proposed actions are appropriately justified.

The objective of this audit was to determine if the CRGR adds value for the Executive Director for Operations’ decisionmaking purposes and whether the committee’s function is still needed.

Audit Results:

The CRGR no longer functions as originally intended with respect to generic backfit reviews. Although NRC must still ensure that generic backfits are appropriately justified based on regulations and policy, the CRGR no longer performs the central role in this process. This is because the agency’s processes have evolved, which, in effect, resulted in other offices assuming some of the CRGR’s duties. However, the agency has not developed overarching, agencywide guidance that describes its current backfit review process or reassessed what, if any, role the CRGR should play in the current process. As a result, the CRGR does not add its full intended value as originally envisioned for backfit review. Furthermore, external stakeholders do not understand the CRGR’s involvement in the agency’s backfit review process and expressed confusion on how NRC backfit decisions are made. Without reassessing and documenting its current internal backfit review process, the agency cannot be assured that it is taking consistent or appropriate action with regard to backfit reviews and is taking the necessary steps to prevent unnecessary regulatory burden on NRC licensees. *(Addresses Management and Performance Challenges #2 and #4)*





Audit of NRC's Occupant Emergency Program

OIG STRATEGIC GOAL: SECURITY

An Occupant Emergency Program (OEP) is defined as, “a short-term emergency response program [that] establishes procedures for safeguarding lives and property during emergencies.” A fundamental part of an OEP is an occupant emergency plan containing a set of procedures to protect life and property in a specific Federally occupied space under defined emergency conditions. Federal management regulations require every facility owned or leased by the Federal Government to have an occupant emergency plan. These regulations contain detailed information on how the plan should be developed and implemented. NRC Management Directive 10.130, *Safety and Health Program Under the Occupational Safety and Health Act*, provides criteria for developing and implementing individualized occupant emergency plans for each of the NRC-owned or leased buildings.

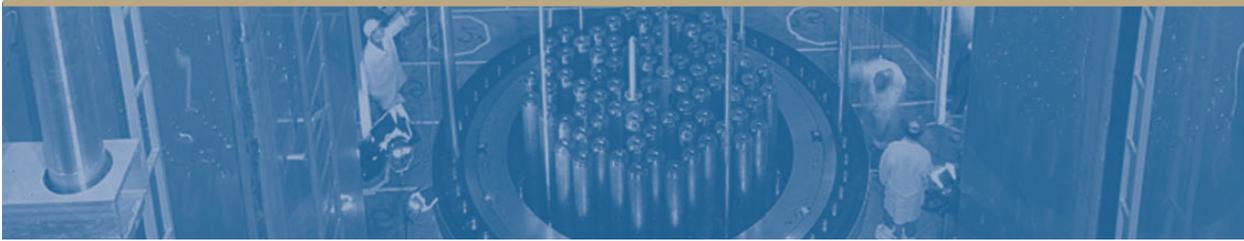
The audit objective was to evaluate the extent to which the agency's Occupant Emergency Program complies with Federal regulations and standards.

Audit Results:

Although NRC's OEP meets Federal requirements and standards, weaknesses pertaining to the implementation of the OEP were identified relating to staff awareness, emergency equipment, and signage.

Staff Lacks Awareness of Emergency Procedures

NRC has not adequately prepared its employees for emergencies, thereby potentially endangering staff safety and well-being. An OIG survey found that many NRC staff was unaware of what to do in an emergency. For example, approximately one-third of employees surveyed had not read their building's occupant emergency plan and did not know the location of their designated assembly area or who to report to upon arrival at the designated spot. In addition, more than one-third of surveyed employees who have assigned duties during an emergency (e.g., floor monitors, stairwell monitors) had not been trained on those duties. Staff are unfamiliar with procedures and untrained on duties because NRC has not provided staff with training on emergency procedures or conducted full-



scale, annual evacuation drills. The last full-scale evacuation drill was held in October 2004. In the intervening period, more than 1,500 new staff have been hired and several office moves have occurred. As a result, NRC staff and other building occupants may not know how to respond appropriately during an emergency, thereby putting their safety and that of their colleagues at risk.

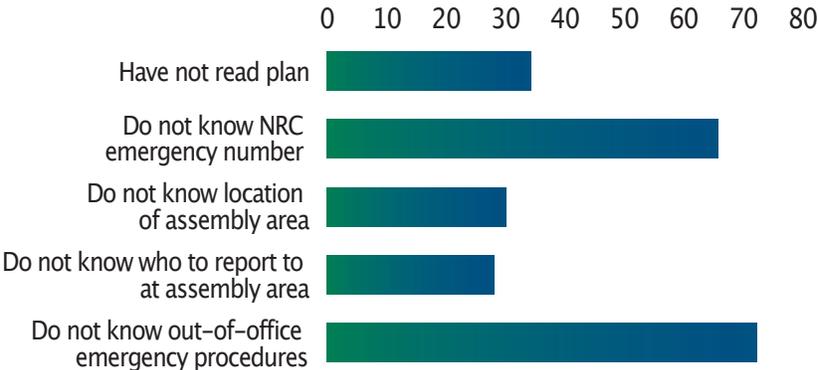
Emergency Equipment Is Inadequate and Poorly Maintained

Federal agencies have published guidelines governing the placement and maintenance of lifesaving equipment such as Automatic External Defibrillators (AEDs) and Personal Emergency Kits (PEKs) for staff use during an emergency. NRC’s AED program is inadequate, and agency PEKs are inconsistently distributed and some contents are outdated. Some of the agency’s AEDs and PEKs may not be adequate because the agency does not require that such equipment be routinely maintained or take into consideration industry best practices for emergency equipment.

Without conducting routine maintenance or consistently issuing emergency equipment, NRC lacks assurance that lifesaving emergency equipment will be available and ready to use when needed.

Headquarters Occupant Emergency Plan Survey

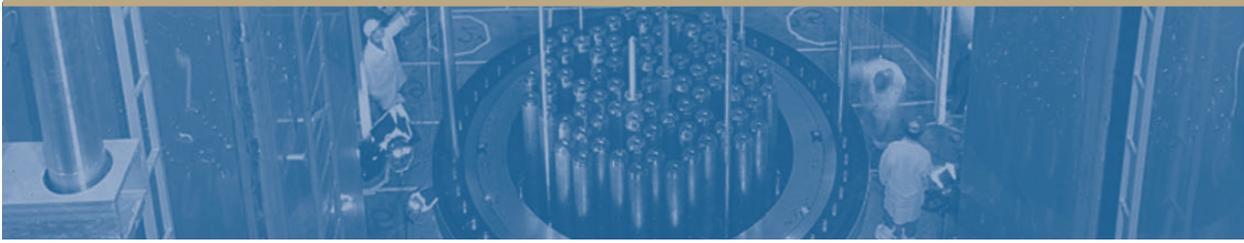
Percentage based on 159 employees surveyed



Results of survey regarding staff awareness of headquarters occupant emergency plans

Signage in the White Flint Complex Is Inadequate and Inconsistent

While the agency has posted signage denoting exit routes, some of the signage does not meet Federal guidelines and industry standards. Specifically, current signage, including evacuation maps and stairwell routing in the White Flint complex, is inadequate and inconsistently designed and posted. These deficiencies



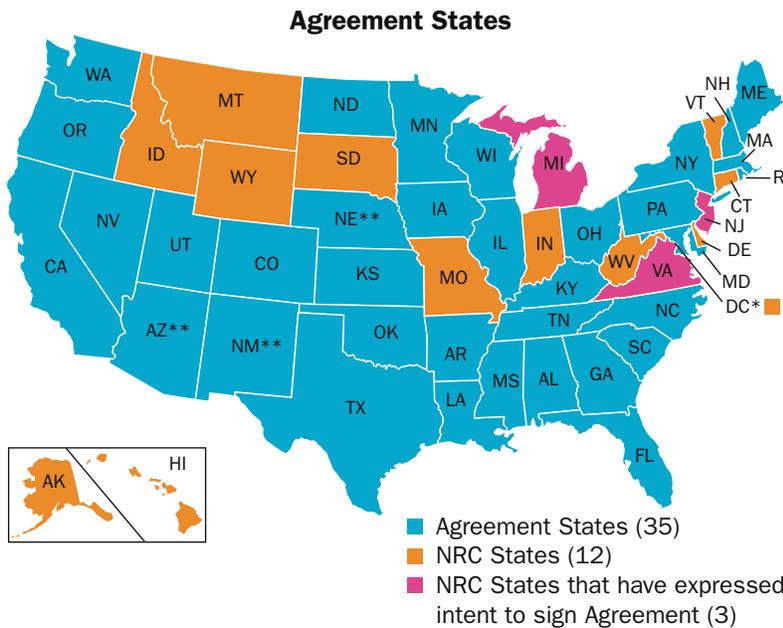
exist because management was unfamiliar with applicable guidance and standards. Without upgrading existing signage to meet Federal guidance and industry standards, NRC staff in the White Flint complex may be unable to evacuate the complex safely and expediently during an emergency. (*Addresses Management and Performance Challenge #8*)

Audit of NRC's Agreement State Program

OIG STRATEGIC GOAL: SAFETY

In accordance with section 274 of the Atomic Energy Act, as amended, NRC may relinquish its authority to regulate byproduct, source, and limited quantities of special nuclear material to States (Agreement materials). These States must first

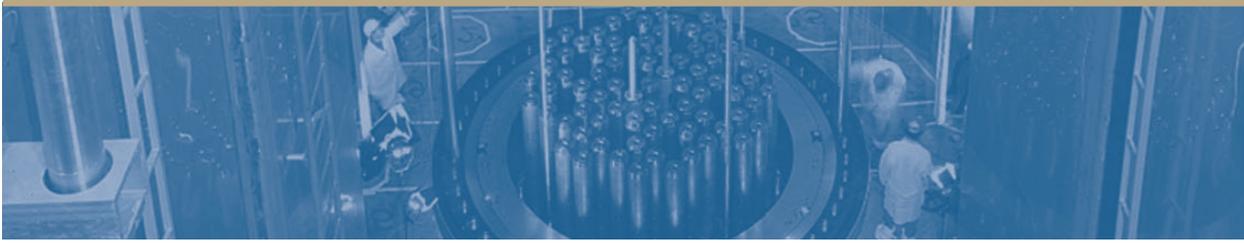
demonstrate that their regulatory programs are adequate to protect public health and safety and compatible with NRC's program. States that have entered into an agreement assuming this regulatory authority from NRC are called Agreement States. There are currently 35 Agreement States.



Source: Information depicted based on NRC Web site as of September 9, 2008.

NRC has programmatic responsibility to periodically review the actions of the Agreement States to comply with the requirements of the Atomic Energy Act. NRC's policy is to evaluate Agreement State radiation control programs using performance indicators to ensure that public health

and safety is being adequately protected and that Agreement State programs are compatible with NRC's program. In order to accomplish this task, NRC periodically reviews Agreement States using the Integrated Materials Performance Evaluation Program (IMPEP).



The audit objective was to assess NRC's oversight of the adequacy and effectiveness of Agreement State programs. The OIG focused its review on the IMPEP process as well as other elements of the Agreement State program.

Audit Results:

The purpose of the Agreement State program is to ensure the adequate protection of public health and safety in the uses of Agreement materials.³ Although NRC maintains oversight of Agreement States, there are program adequacy and effectiveness issues that require management's attention. Specifically,

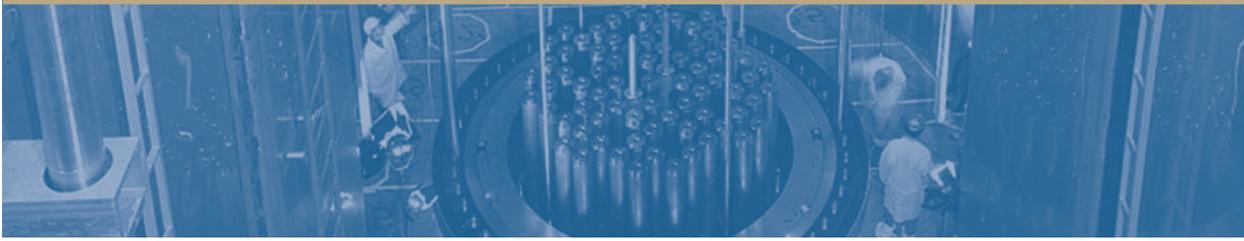
NRC does not effectively monitor IMPEP operational issues

- Agreement State program managers are unaware of several operational issues to include a lack of underlying cause analysis during IMPEP reviews and in reports, inconsistent use of the pre-IMPEP questionnaire, IMPEP team leaders unprepared to conduct reviews, and lack of awareness of associated guidance by selected IMPEP State team members and/or NRC staff accompanying staff inspectors. This condition exists because there is no systematic mechanism for conducting self-assessments and capturing lessons learned for IMPEP. Consequently, IMPEP may not be as effective as it could be for assessing the adequacy and compatibility of Agreement State programs.

NRC could be challenged to re-exert authority over an Agreement State program in the event of an emergency

- Under the Atomic Energy Act, NRC can temporarily suspend its agreement with a State during an emergency situation. However, NRC has not identified all of the information necessary for re-exerting authority and lacks the formal procedural guidance about what information is needed about Agreement State programs and materials licensees. Without this valuable planning information and lack of access to certain programs and materials licensee information, NRC could lose oversight and awareness of licensees and materials.

³ Byproduct, source, and limited quantities of special nuclear materials regulated by an Agreement State.



NRC lacks standardization in communications with, and collection of, information from the Agreement States

- NRC lacks (1) standardization in communication procedures, and (2) a standardized data collection process that can be used as a basis for developing a national information sharing tool. As a result, some States may be unaware of important issues, and NRC does not have a full and accurate picture of Agreement State regulatory activities.

Weaknesses exist in NRC's review of Agreement State event reporting

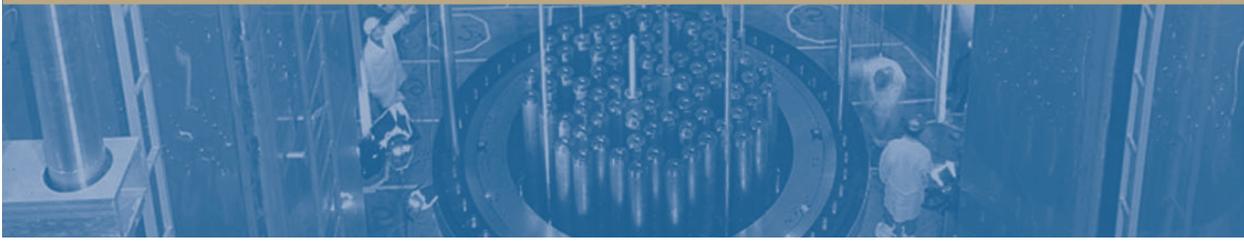
- NRC's reviews of whether an Agreement State has appropriately reported all events to the Nuclear Material Events Database (NMED) may not be consistently performed because NRC's IMPEP reviews do not require an analysis of unreported events to determine whether such events are being appropriately identified for and included in NMED. Consequently, NRC and the public may have an inaccurate accounting of material events in some States, which could also hamper events data trend analysis efforts. (*Addresses Management and Performance Challenges #1, #2, #3, and #4*)

Audit of NRC's Warehouse Operations

OIG STRATEGIC GOAL: CORPORATE MANAGEMENT

NRC maintains two warehouses, referred to as the main warehouse and the annex, located about a mile away from the agency's main headquarters buildings. These warehouses are used to receive, store, and deliver property, equipment, and supplies needed for NRC operations. The main warehouse also contains a security lockup cage used to store sensitive property (e.g., laptop computers, cell phones). As of February 2009, the two warehouses contained almost 16,000 pieces of property and equipment with an initial acquisition cost of approximately \$5.1 million.

The purpose of this audit was to determine whether NRC has established and implemented an effective system of internal controls for maintaining accountability and control of agency property stored in the warehouses.



Audit Results:

NRC's warehouse operations support the agency's mission by ensuring that property is received, stored, and delivered to NRC staff as needed. The warehouse also provides logistical support for office moves and assistance with special events. The OIG audit determined opportunities exist to (1) enhance safety and security, (2) increase inventory accuracy and operational efficiency, and (3) improve contract administration.

Safety and Security Evaluations Not Conducted and Segregation of Duties Not Implemented

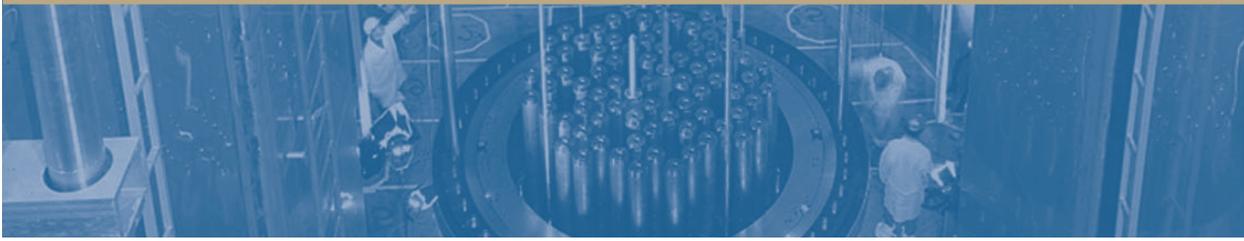
Federal law and guidance require that NRC evaluate the safety and security of its facilities and use sound physical security practices to protect agency property. However, NRC has not conducted the required periodic safety inspections of the NRC main warehouse and annex or a required security assessment of the NRC annex. Additionally, despite internal control standards that require segregation of duties, warehouse staff, responsible for the day-to-day operation of the agency's warehouses, also control and monitor the video surveillance system located at the main warehouse. Management inattention to the required safety inspections and security assessment as well as the failure to implement segregation of duties, leaves NRC staff potentially vulnerable to workplace hazards, while exposing NRC to a heightened risk of property loss.



Security lockup cage within the main NRC warehouse

SPMS Contains Incomplete and Inaccurate Location Information

Property management system guidance and internal control standards require agency personnel to record information accurately and timely to maintain accountability and control over Government property. Despite these requirements, NRC's official Space and Property Management System (SPMS), contains incomplete and inaccurate location information. This condition exists because SPMS's full capability is not being used, property locations are changed in SPMS prior to actual property movement, and periodic SPMS monitoring measures have not been implemented.



Incomplete and inaccurate location information results in inefficient, duplicative work efforts, heightens the risk for lost property and information, and may result in unnecessary expense.

Contract Administration Deficiencies

NRC is required to administer the contract for warehouse support services in accordance with agency policy and the contract provisions. However, the following contract administration deficiencies exist:

- Incomplete contractor security packages are submitted to the Division of Facilities and Security.
- Registration procedures are not followed for unbadged contractor representatives.
- Contractor performance is not measured.

OIG determined that NRC warehouse employees did not administer the warehouse contract in accordance with agency policy and the contract provisions. As a result, NRC lacks assurance that contractors working at NRC facilities do not pose a security risk. In addition, NRC may be paying excess contract costs because agency staff did not measure contractor performance; therefore, records do not exist for the agency to disallow contract costs. (*Addresses Management and Performance Challenge #7*)

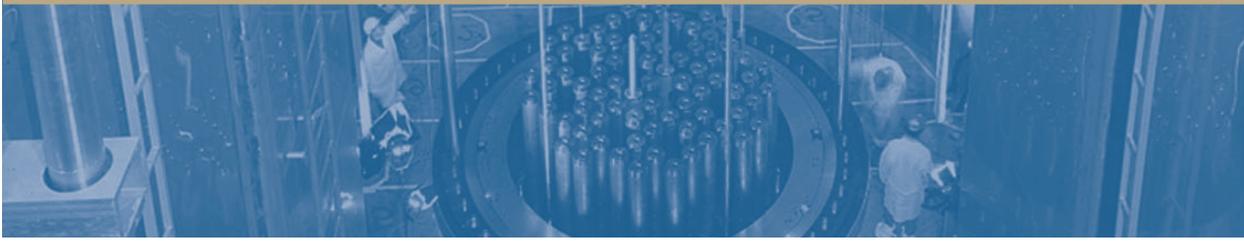
AUDITS IN PROGRESS

Survey of NRC's Safety Culture and Climate

OIG STRATEGIC GOAL: CORPORATE MANAGEMENT

OIG performed surveys in 1998, 2002, and 2006 that assessed the organizational safety culture and climate of the agency's workforce and identified agency strengths and opportunities for improvement. In response to the survey results, the agency evaluated the key areas for improvement and implemented strategies for addressing them.

A clear understanding of NRC's current safety culture and climate will facilitate identification of agency strengths and opportunities as it meets



significant challenges. These challenges include the 2008 surge in license applications for new commercial nuclear power reactors in the United States, disposal of high-level radioactive waste storage issues, and provision of adequate workspace and related facilities for a growing workforce.

The survey objectives are to (1) measure NRC's safety culture and climate to identify areas of strength and opportunities for improvement; (2) compare the results of this survey against the survey results that OIG reported previously; and (3) provide, where practical, benchmarks for the qualitative and quantitative findings against other similar organizations. *(Addresses all of the Management and Performance Challenges)*

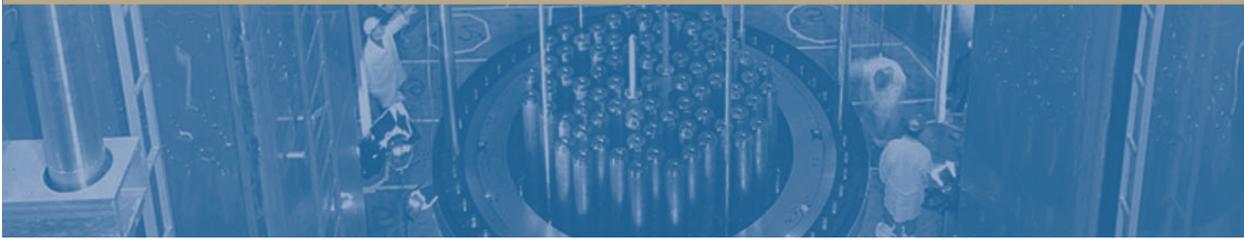
Audit of NRC's Construction Oversight at Nuclear Reactor Facilities

OIG STRATEGIC GOAL: SAFETY

In the 1970s and 1980s, a number of nuclear power plant construction projects in the United States were stopped with the plants partially built—some of these plants were never finished. During this time period, Congress directed NRC to study existing and alternative programs for improving the assurance of quality in the design and construction of commercial nuclear power plants. In response, NRC conducted a review and issued NUREG-1055, *Improving Quality and the Assurance of Quality in the Design and Construction of Nuclear Power Plants*, in 1984. The study recommended a number of improvements in industry and NRC programs.

The nuclear industry is on the verge of potentially constructing new nuclear power plants; but, it has been decades since industry and NRC have been involved in the design and construction of such plants. Reactors are currently under construction around the world, including some with designs like those planned in the United States. However, there are reported problems with the quality assurance during construction at these plants, for example, in Finland and France. As a result, OIG will review the lessons learned from United States experience as captured in NUREG-1055 and other historical records as well as the experience at ongoing construction projects in the foreign market.

The audit objective is to determine if and how NRC is incorporating and using the domestic and foreign lessons learned in its construction oversight programs. *(Addresses Management and Performance Challenges #3 and #4)*



Audit of NRC's Quality Assurance Planning for New Reactors

OIG STRATEGIC GOAL: SAFETY

Chapter 10, Part 50, of the Code of Federal Regulations (10 CFR 50) requires every applicant for a construction permit to include in its preliminary safety analysis report a description of the quality assurance program to be applied to the design, fabrication, construction, and testing of the structures, systems, and components of the facility. This quality assurance program includes the managerial and administrative controls to be used to assure safe operation. These requirements also apply to holders of combined licenses issued under 10 CFR 52.

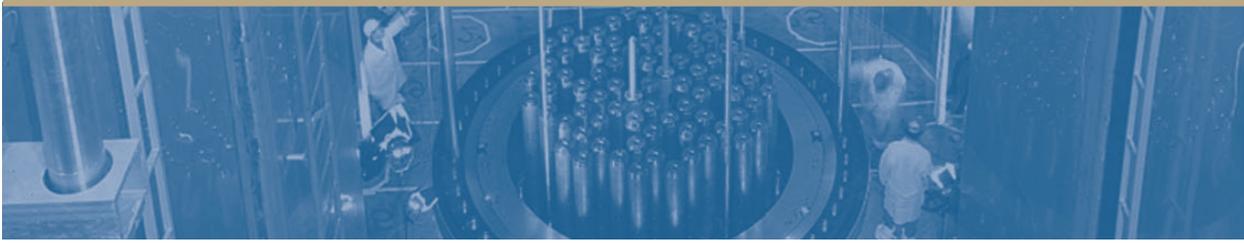
As part of its regulatory responsibilities, NRC reviews and evaluates the description of the quality assurance program for the design and construction phases in each application for a construction permit, a manufacturing license, or a standardized design approval. Prior to docketing a construction permit application, the NRC performs a substantive review of the applicant's quality assurance program description relative to ongoing design and procurement activities. This review and an associated inspection is performed immediately after tendering of the application to determine that a satisfactory quality assurance program has been established and is being implemented. However, an applicant's quality assurance program is not re-reviewed except for conformance to positions developed during the course of the NRC staff technical review.

The audit objective is to determine the extent to which NRC provides oversight of applicant new reactor quality assurance programs. (*Addresses Management and Performance Challenges #2, #3, and #4*)

Audit of Security Measures for Special Nuclear Materials

OIG STRATEGIC GOAL: SECURITY

The Office of Nuclear Material Safety and Safeguards (NMSS) plans, coordinates, and manages the development and implementation of policies and programs for special nuclear material (SNM) security by conducting Material Control and Accounting (MC&A) inspections at fuel cycle facilities throughout the year. The primary goal of the MC&A inspection program is to ensure that the licensee's MC&A system adequately detects and protects against the loss, theft, or diversion of SNM that the licensee is authorized to possess, store, and utilize at its facility.



The Office of Nuclear Security and Incident Response (NSIR) manages the overall development and implementation of policies and programs for physical security at fuel cycle facilities. NSIR also manages contingency planning and emergency response activities for safeguards events at fuel cycle facilities and assesses fuel cycle facility security reports. Additionally, the staff provides oversight of the licensee's fuel cycle security inspection programs.

Over the past several years the responsibility for security inspections of fuel cycle facilities has been moved between NMSS and NSIR numerous times. Currently, NMSS' MC&A Branch and NSIR's Fuel Cycle Safeguards and Security Branch share inspection responsibilities for fuel cycle facilities.

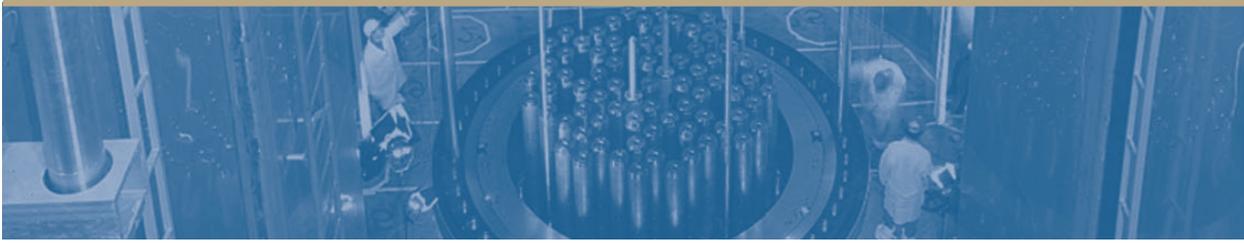
The audit objective is to assess the effectiveness of NRC's inspection program to ensure the physical protection and accountability of SNM at fuel cycle facilities. *(Addresses Management and Performance Challenges #1 and #3)*

Audit of the Force-on-Force Program

OIG STRATEGIC GOAL: SECURITY

NSIR has the responsibility for assessing the development and implementation of security programs at various U.S. nuclear facilities, including nuclear power plants. To assess security programs at nuclear power plants, NSIR performs force-on-force exercises at each plant on a triennial basis in accordance with agency regulations. The exercises take approximately 2 weeks to complete; the first week is used for exercise preparation and design and the second week is used to execute and evaluate the exercise.

Force-on-force exercises are designed to test various elements of a facility's security program to determine if the facility's security program is capable of defeating a terrorist attack. To ensure a rigorous and thorough exercise, NSIR uses contractor support in the design and implementation of the exercise. To successfully pass a force-on-force exercise, a nuclear facility must defeat an attack on the plant in two of three exercise drills. At the conclusion of each drill, NRC evaluates the licensee's security program response and security force and assigns a pass, fail, or indeterminate finding. At the close of the exercise, NRC staff provide a debrief to the licensee to discuss how each exercise was evaluated and any subsequent findings.



The audit objective will be to evaluate the agency's force-on-force program to determine if the design and application of the program is consistent, thorough, reasonable, and in accordance with NRC regulations. (*Addresses Management and Performance Challenges #1 and #2*)

Audit of the Regional Counsel Role in the Enforcement Process

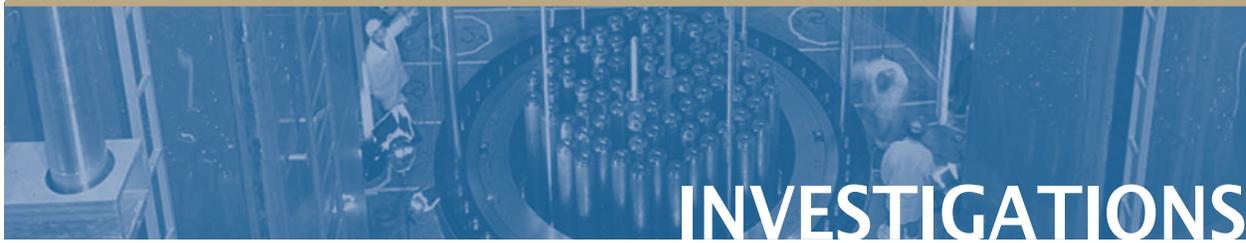
OIG STRATEGIC GOAL: SAFETY

NRC is authorized to enforce its regulatory requirements by imposing sanctions against licensees who violate those requirements. The agency's enforcement program is directed by the Office of Enforcement (OE) in headquarters, but is implemented primarily in the regional offices, where staff conduct inspections and investigations of licensees to identify violations and assess their significance so that appropriate enforcement actions can be determined. Less significant (non-escalated) violations may be addressed entirely at the regional office level, while more significant (escalated) violations are addressed through a collaborative process involving OE, the Office of the General Counsel, and other headquarters offices as well as the regional offices.

In three of NRC's four regional offices, a dedicated enforcement staff supervisor oversees the work of the regional enforcement staff. In Region II, however, the Regional Counsel serves both as the region's attorney and as the enforcement staff supervisor. As enforcement supervisor, this individual is to ensure that the region adheres to the agency's enforcement policy, oversees the preparation of escalated enforcement packages, and performs other enforcement related tasks. As regional counsel, this individual provides legal advice to the region, including advice on the legal sufficiency of escalated enforcement packages. This audit report refers to Region II's arrangement as the "dual role" approach.

A recent OIG audit found that differences in the ways the regional offices implement the enforcement program can significantly impact the enforcement process, leaving enforcement decisions vulnerable to challenge and potentially compromising public confidence in NRC's enforcement program.

The audit objective was to determine whether combining the roles of regional counsel and enforcement supervisor is a workable approach for regional enforcement programs. (*Addresses Management and Performance Challenges #1 and #3*)



During this reporting period, OIG received 84 allegations, initiated 24 investigations, and closed 14 cases. In addition, the OIG made 22 referrals to NRC management, 5 to the Department of Justice, and 2 to State authorities.

INVESTIGATIVE CASE SUMMARIES

Check Scam Involving the NRC

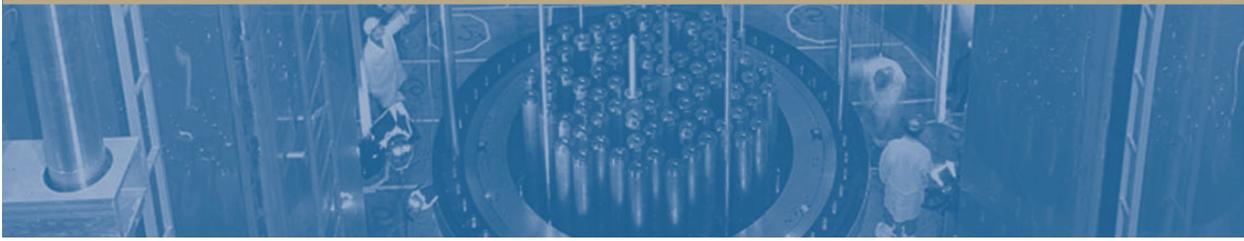
OIG STRATEGIC GOAL: CORPORATE MANAGEMENT

OIG completed an investigation into an allegation by a New Jersey resident concerning a counterfeit check that appeared to come from the NRC, which the resident received for items sold over the Internet.

OIG identified a total of eight public citizens throughout the United States who sold items over the Internet and received counterfeit checks that appeared to come from NRC. Printed on each of the counterfeit checks was the NRC accounts receivable account number and payment address that were published on NRC's Web site to inform licensees where to send their license payments. Each check was made out for more than the cost of the item being sold on the Internet. Each seller received instructions via e-mail to cash the check, keep money for the item sold as well some additional money for themselves, and return the balance via wire transfer. The e-mail instructions were generated from Nigeria.

OIG determined that two of the individuals who received counterfeit NRC checks were instructed to wire the money to an address in Los Angeles, California. OIG found that the woman who lived at the California address, and her brother, were hired by an individual they "met" online to manufacture checks for and transfer money to an alleged textile company in Nigeria. OIG learned that both the woman and her brother claimed that between September 2007 and August 2008, they manufactured 500 to 2,500 checks a month and collected approximately \$150,000 in wired payments. After keeping \$20,000 for themselves, they sent the remaining money to Nigeria.

OIG also determined that the check scheme did not involve any NRC personnel and that there was no loss to the NRC from the check scheme. OIG provided information concerning the check scheme to agency staff, who, in turn, removed



the NRC accounts receivable account number from the NRC's Web site. Details of the check scheme were provided to the U.S. Secret Service for investigation. (*Addresses Management and Performance Challenge #7*)

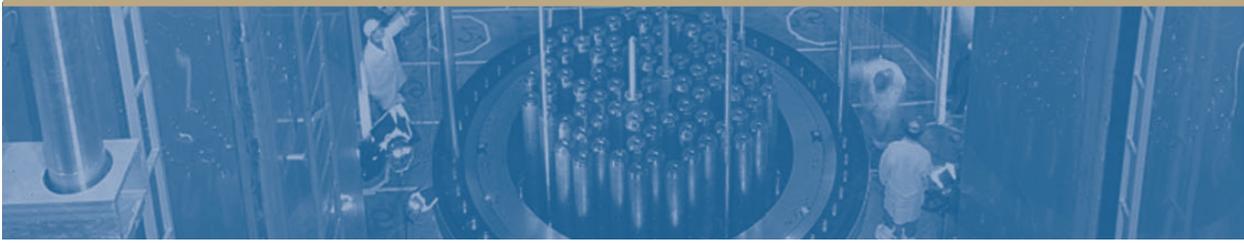
NRC Contractor Violates False Claims Act

OIG STRATEGIC GOAL: CORPORATE MANAGEMENT

OIG completed an investigation involving an NRC contractor, Science Applications International Corporation (SAIC), that violated the False Claims Act, Title 31, United States Code Section 3729. On October 7, 2008, the U.S. District Court jury ordered SAIC to pay \$6.49 million in damages to the NRC.

OIG found that in 1992 and 1999, the NRC awarded two contracts to SAIC to provide the agency with technical assistance on the development of a rule that would allow for the recycling and reuse of slightly radioactive material, primarily contaminated metals. In 1992, SAIC was responsible for assisting NRC establish scientific standards governing the reuse of such material and was to present an options paper outlining the possible approaches to rulemaking for the release of these materials. The goal of the 1999 contract was to assess regulatory alternatives regarding the release of reusable materials. As part of both contract requirements, SAIC certified to NRC that SAIC did not have any conflicts of interest; however, a private citizen reported that SAIC did have conflicts of interest related to the rulemaking for release of reusable materials. OIG investigation determined that SAIC breached its organizational conflict-of-interest obligations under both NRC contracts by engaging in relationships with organizations, including the Association of Radioactive Metal Recyclers (ARMR), whose aim was to advocate in favor of recycling and reusing radioactive materials. By concealing these relationships SAIC stood to benefit from the NRC rule. The OIG investigation concluded that SAIC violated the False Claims Act and breached the contract requirements with the NRC by not disclosing these relationships.

The SAIC investigation was presented to the U.S. Department of Justice, which, assisted by the NRC Office of General Counsel, filed a civil complaint in the U.S. District Court. As a result of a Federal trial, a jury found that SAIC violated the False Claims Act and awarded the United States \$6.49 million under the False Claims Act for 77 false claims and statements, damages, and civil penalties. (*Addresses Management and Performance Challenges #1 and #5*)



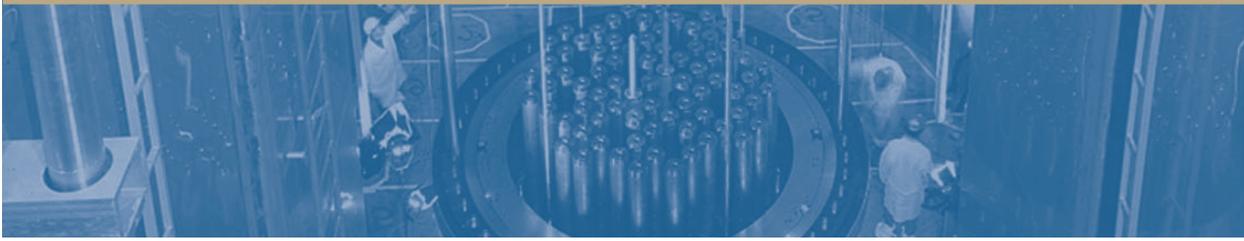
NMSS Staff Not Properly Reviewing MOX Fuel Fabrication Facility License Application

OIG STRATEGIC GOAL: SAFETY

OIG conducted an investigation into an allegation made by a former NRC staff member who claimed that NRC management ignored safety concerns regarding a license application for a Mixed Oxide (MOX) Fuel Fabrication Facility in Aiken, South Carolina. The former NRC staff member was involved in reviewing chemical engineering aspects of the MOX license application. The former staff member alleged that NRC management did not ask the license applicant to clarify safety significant portions of its application.

OIG learned that the former staff member forwarded 95 concerns to his management as part of the review of the MOX license application and thought those concerns should have been given to the license applicant immediately. However, OIG learned that, in accordance with NRC's license review process, the MOX chemical engineering review team reviewed all of these concerns. Based on this review, the team determined some concerns were not applicable to the chemical engineering review, sent some to teams reviewing other issues, and included some in the chemical engineering request for additional information (RAIs) that were sent to the license applicant.

As background, RAIs are questions that NRC staff present to a license applicant to obtain additional information so a complete review of the application can be finalized. NRC staff consolidate RAIs to the extent practicable to avoid burdensome multiple submissions to applicants. OIG determined that NRC has a specific process in place to review concerns and is using this process for the MOX review. In accordance with this process, NRC staff assesses concerns raised and, if appropriate, submits them as RAIs to the license applicant. OIG also determined that in March 2009, NRC requested the license applicant to respond to the RAIs so that the staff could complete its review of the chemical process safety aspects of the MOX facility. (*Addresses Management and Performance Challenge #1*)



Terminated NRC License for Distribution of Irradiated Gemstones

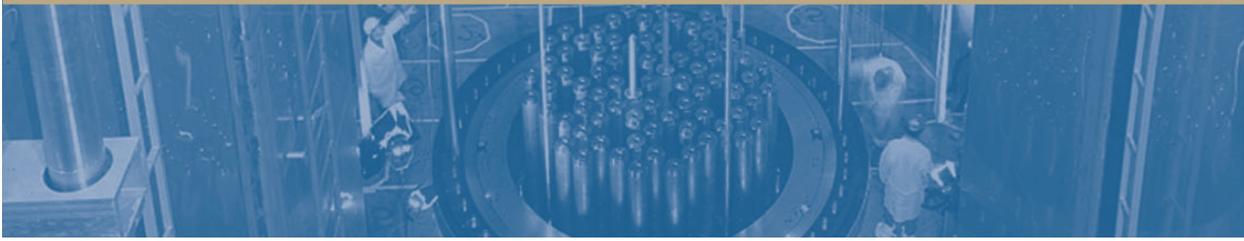
OIG STRATEGIC GOAL: SAFETY

OIG completed an investigation into a 2007 allegation that there were irradiated gemstones, not regulated by NRC, widely available in the United States and that NRC did not know whether the gemstone radioactivity levels were within NRC-regulatory limits. According to the allegation, these gemstones were available to the public even through the last NRC license for distributing irradiated gemstones had been terminated.

As background, NRC began regulating the distribution of irradiated gemstones during the 1980s. Irradiated gemstones fall under NRC's regulatory jurisdiction because the process of enhancing the stones' color can make the gems radioactive. NRC requires that the initial distribution of these stones be by an NRC-licensed distributor. After initial distribution, the stones do not need to be regulated and subsequent distributors do not need to be licensed. NRC issues distribution licenses to companies licensed for initial distribution of irradiated gemstones. These licenses are issued for 10 years, at which point licensees have the option to renew.

NRC reviewed the allegation and confirmed that companies were purchasing irradiated gemstones from suppliers and selling the irradiated gemstones in the United States without exempt distribution licenses. NRC also conducted inspections of gemstone vendors and distributors, which found gemstone radioactivity levels within regulatory limits.

OIG learned that NRC issued approximately five distribution licenses to companies during the late 1980s, but by December 2001, due to changes in the marketplace and less consumer interest in irradiated gemstones, these licensees had terminated their licenses. The last entity to terminate its exempt distribution license was the University of Missouri Research Reactor Center (MURR). However, MURR had a separate NRC license, which allowed it to continue to irradiate gemstones. This license also allowed MURR to transfer the gemstones to another NRC licensee. Thus, MURR continued to irradiate gemstones, but entered into a contractual arrangement with another NRC licensee that could receive the irradiated gemstones



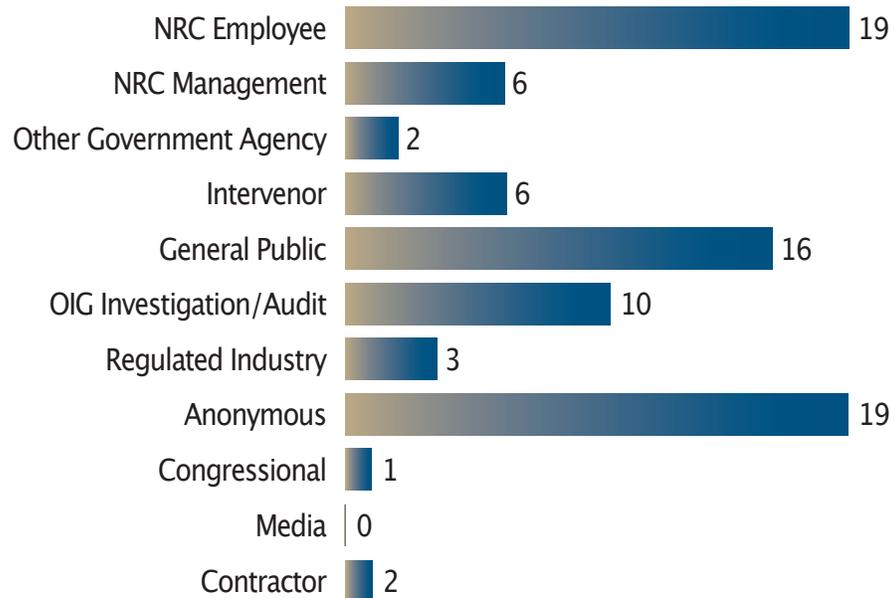
from MURR. Under the contract, after the gemstones were irradiated at MURR, they would be held in a storage facility until the radioactivity levels were considered low enough to ship the gemstones to the contracted licensee, which would then export the gemstones outside of the United States.

OIG determined that after MURR terminated its exempt distribution license, the distribution of irradiated gemstones was unregulated for approximately 5 years—from December 2001 to mid-2007. During this time, irradiated gemstones were widely available in the United States marketplace without NRC regulatory oversight. This situation occurred because the last licensee terminated its license and this went unnoticed by NRC management. However, NRC has taken steps to regain control over this industry by requiring licensees to provide an annual report detailing the type, quantity, and radioactivity levels of irradiated gemstones they distribute. Also, NRC has written procedures in place requiring staff to contact a licensee who requests to terminate a license to determine why the licensee is no longer interested in holding a license and to alert agency management if, in the future, a last exempt distribution license is terminated. (*Addresses Management and Performance Challenge #4*)

STATISTICAL SUMMARY OF OIG ACCOMPLISHMENTS

INVESTIGATIVE STATISTICS

Source of Allegations — October 1, 2008, through March 31, 2009

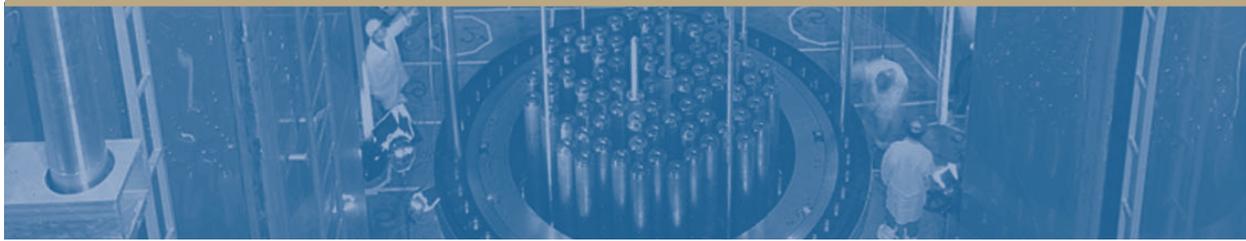


Allegations resulting from Hotline calls: 35

Total: 84

Disposition of Allegations — October 1, 2008, through March 31, 2009



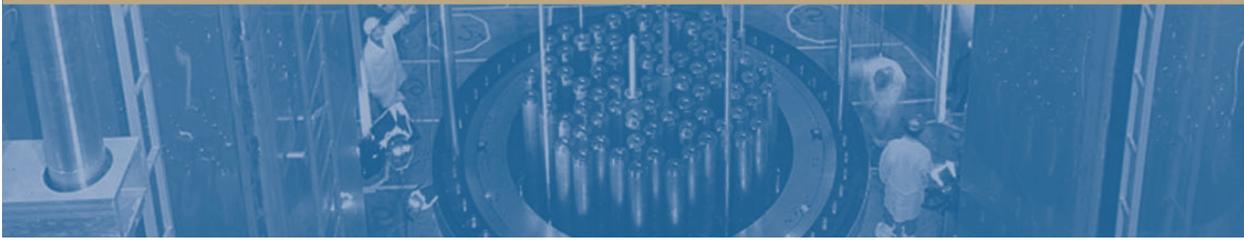


Status of Investigations

DOJ Referrals	5
DOJ Pending	0
DOJ Declinations (one from a another period)	6
Arrest	1
NRC Administrative Actions:	
Terminations and Resignations	0
Suspensions and Demotions	1
Counseling	6
Recoveries	\$6,499,097
State Referrals	2
State Accepted	2

Summary of Investigations

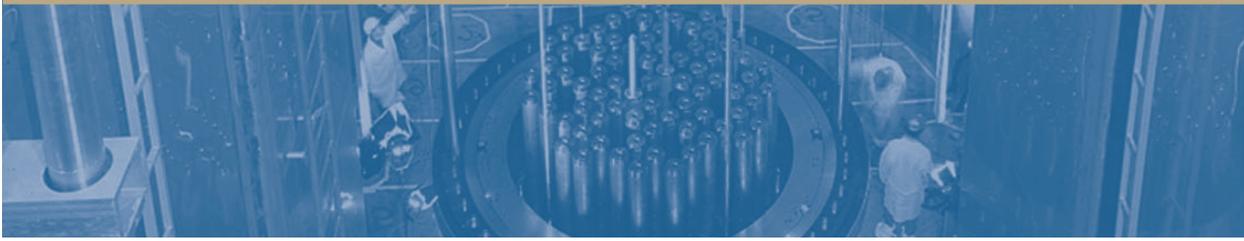
<i>Classification of Investigations</i>	<i>Carryover</i>	<i>Opened Cases</i>	<i>Closed Cases</i>	<i>Cases In Progress</i>
Conflict of Interest	1	0	0	1
External Fraud	4	1	2	3
False Statements	1	1	1	1
Misuse of Government Property	2	1	2	1
Employee Misconduct	7	6	2	11
Management Misconduct	1	3	0	4
Mishandling of Technical Allegations	8	6	4	10
Whistleblower Reprisal	0	2	0	2
Proactive Initiatives	2	2	1	3
Project	7	2	2	7
Event Inquiries	1	0	0	1
Total Investigations	34	24	14	44



AUDIT LISTINGS

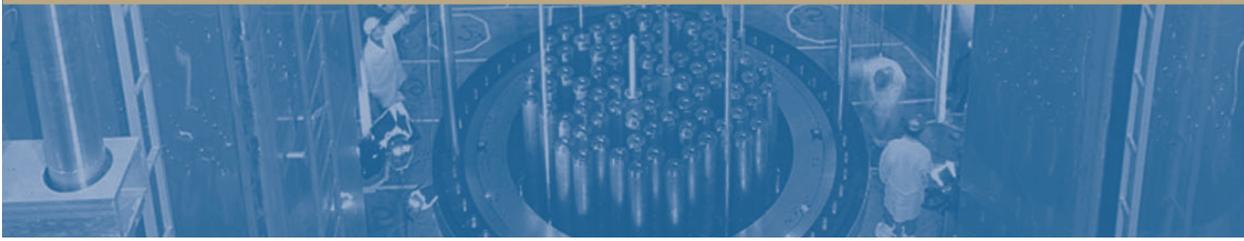
Internal Program Audit and Special Evaluation Reports

<i>Date</i>	<i>Title</i>	<i>Audit Number</i>
03/31/2009	Audit of NRC's Warehouse Operations	OIG-09-A-09
03/16/2009	Audit of NRC's Agreement State Program	OIG-09-A-08
02/11/2009	Audit of NRC's Occupant Emergency Program	OIG-09-A-07
02/02/2009	Audit of the Committee to Review Generic Requirements	OIG-09-A-06
12/19/2008	Transmittal of the Independent Auditor's Report on the Condensed Financial Statements	OIG- 09-A-05
12/17/2008	Memorandum Report: Review of NRC's Implementation of the Federal Managers' Financial Integrity Act for Fiscal Year 2008	OIG-09-A-04
11/20/2008	Audit of National Source Tracking System Information System Development	OIG-09-A-03
11/17/2008	Independent Auditor's Report on the U.S. Nuclear Regulatory Commission's Special-Purpose Financial Statements as of September 30, 2008, and for the Year then Ended	OIG-09-A-02
11/10/2008	Results of the Audit of the United States Nuclear Regulatory Commission's Financial Statements for Fiscal Year 2008	OIG-09-A-01



Contract Audit Reports

<i>OIG Issue Date</i>	<i>Contractor/ Contract Number</i>	<i>Questioned Costs</i>	<i>Unsupported Costs</i>
10/07/08	Information Systems Laboratories, Inc.		
	NRC-02-00-003	0	0
	NRC-03-00-003	0	0
	NRC-03-03-038	0	0
	NRC-04-01-052	0	0
	NRC-04-01-067	0	0
	NRC-04-02-054	0	0
	NRC-04-04-054	0	0
	NRC-04-04-065	0	0
	NRC-04-97-039	0	0
10/07/08	Southwest Research Institute		
	NRC-02-01-005	0	0
	NRC-02-02-012	0	0
	NRC-02-03-002	0	0
	NRC-02-03-005	0	0
	NRC-02-03-007	0	0
	NRC-02-04-001	0	0
	NRC-02-04-014	0	0
	NRC-02-06-021	0	0
	NRC-03-07-046	0	0
	NRC-04-07-064	0	0
11/06/08	Applied Programming Technology, Inc.		
	NRC-04-03-057	0	0
	NRC-04-03-057	0	0
	NRC-04-06-050	0	0



12/08/08	Southwest Research Institute		
	NRC-02-01-005	0	0
	NRC-02-02-012	0	0
	NRC-02-03-002	0	0
	NRC-02-03-005	0	0
	NRC-02-03-007	0	0
	NRC-02-04-001	0	0
	NRC-02-04-014	0	0
	NRC-02-06-021	0	0
	NRC-03-07-046	0	0
	NRC-04-07-064	0	0



AUDIT RESOLUTION ACTIVITIES

TABLE I

**OIG Reports Containing Questioned Costs⁴
October 1, 2008, through March 31, 2009**

<i>Reports</i>	<i>Number of Reports</i>	<i>Questioned Costs (Dollars)</i>	<i>Unsupported Costs (Dollars)</i>
A. For which no management decision had been made by the commencement of the reporting period	1	\$53,004	0
B. Which were issued during the reporting period	0	0	0
Subtotal (A + B)	1	\$53,004	0
C. For which a management decision was made during the reporting period:			
(i) dollar value of disallowed costs	1	\$53,004	0
(ii) dollar value of costs not disallowed	0	0	0
D. For which no management decision had been made by the end of the reporting period	1	0	0
E. For which no management decision was made within 6 months of issuance	0	0	0

⁴Questioned costs are costs that are questioned by the OIG because of an alleged violation of a provision of a law, regulation, contract, grant, cooperative agreement, or other agreement or document governing the expenditure of funds; a finding that, at the time of the audit, such costs are not supported by adequate documentation; or a finding that the expenditure of funds for the intended purpose is unnecessary or unreasonable.

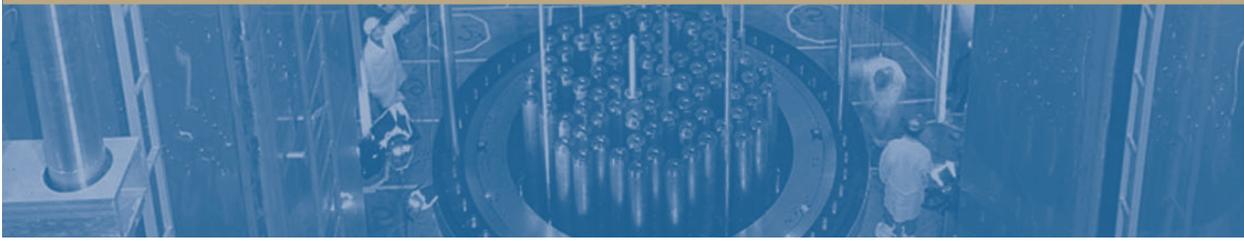


TABLE II

OIG Reports Issued with Recommendations That Funds Be Put to Better Use⁵

<i>Reports</i>	<i>Number of Reports</i>	<i>Dollar Value of Funds</i>
A. For which no management decision had been made by the commencement of the reporting period	1	\$104,000
B. Which were issued during the reporting period	0	0
C. For which a management decision was made during the reporting period:		
(i) dollar value of recommendations that were agreed to by management	1	\$104,000
(ii) dollar value of recommendations that were not agreed to by management	0	0
D. For which no management decision had been made by the end of the reporting period	0	0
E. For which no management decision was made within 6 months of issuance	0	0

⁵A “recommendation that funds be put to better use” is a recommendation by the OIG that funds could be used more efficiently if NRC management took actions to implement and complete the recommendation, including: reductions in outlays; deobligation of funds from programs or operations; withdrawal of interest subsidy costs on loans or loan guarantees, insurance, or bonds; costs not incurred by implementing recommended improvements related to the operations of NRC, a contractor, or a grantee; avoidance of unnecessary expenditures noted in preaward reviews of contract or grant agreements; or any other savings which are specifically identified.

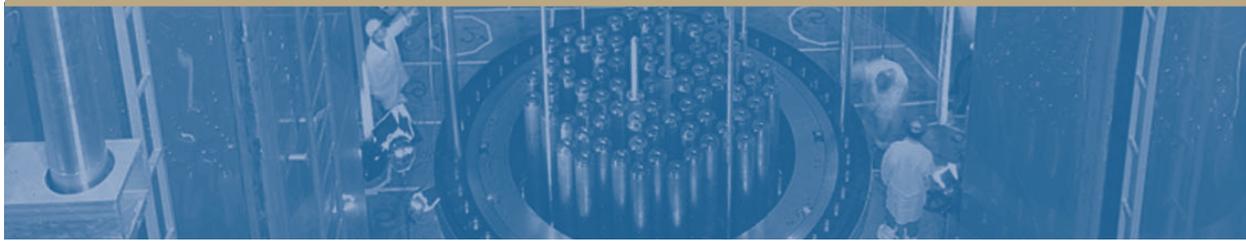


TABLE III

Significant Recommendations Described in Previous Semiannual Reports on Which Corrective Action Has Not Been Completed

<i>Date</i>	<i>Report Title</i>	<i>Number</i>
05/26/03	Audit of NRC's Regulatory Oversight of Special Nuclear Materials Recommendation 1: Conduct periodic inspections to verify that material licensees comply with material control and accountability (MC&A) requirements, including, but not limited to, visual inspections of licensees' special nuclear material (SNM) inventories and validation of reported information.	OIG-03-A-15
03/16/06	Audit of the NRC's Byproduct Materials License Application and Review Process Recommendation 2: Modify the license application and review process to mitigate the risks identified in the vulnerability assessment.	OIG-06-A-11
09/26/06	Evaluation of NRC's Use of Probabilistic Risk Assessment in Regulating the Commercial Nuclear Power Industry Recommendation 3: Conduct a full verification and validation of SAPHIRE version 7.2 and GEM.	OIG-06-A-24
09/06/07	Audit of NRC's License Renewal Program Recommendation 3: Clarify guidance and adjust procedures for auditors' and inspectors' removal of licensee-provided documents from license renewal sites. Recommendation 4: Establish requirements and management controls to standardize the conduct and depth of license renewal operating experience reviews.	OIG-07-A-15

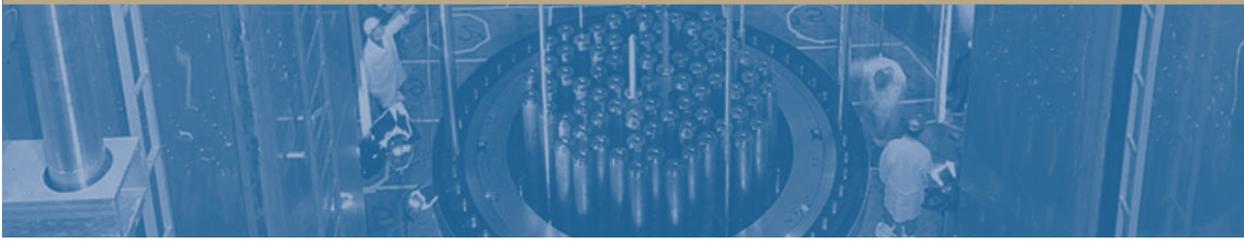
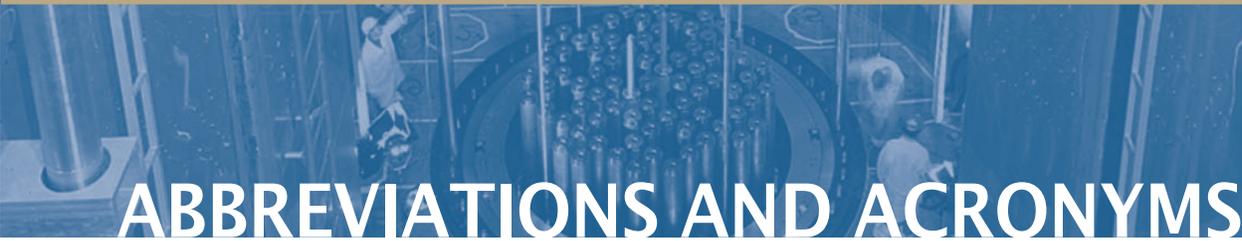


TABLE III (Continued)

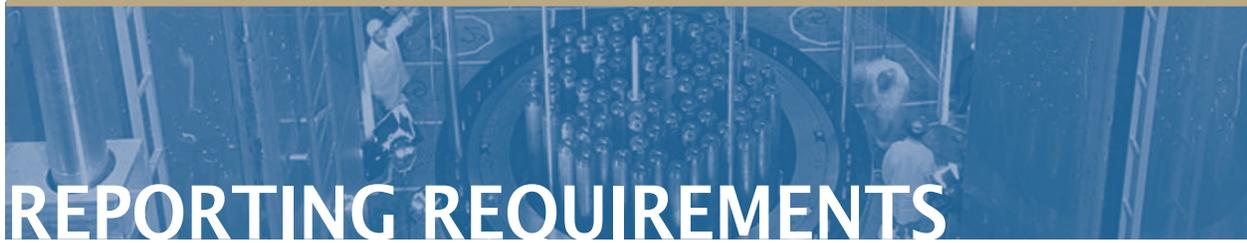
Significant Recommendations Described in Previous Semiannual Reports on Which Corrective Action Has Not Been Completed

<i>Date</i>	<i>Report Title</i>	<i>Number</i>
09/06/07	Audit of NRC's License Renewal Program (Continued) Recommendation 7: Establish a review process to determine whether or not Interim Staff Guidance meets the provisions of 10 CFR 54.37(b), and document accordingly.	OIG-07-A-15
03/28/08	Audit of NRC's Power Uprate Program Recommendation 1: Provide cross-references from baseline and other inspection procedures that are called for in IP 71004.	OIG-08-A-09



ABBREVIATIONS AND ACRONYMS

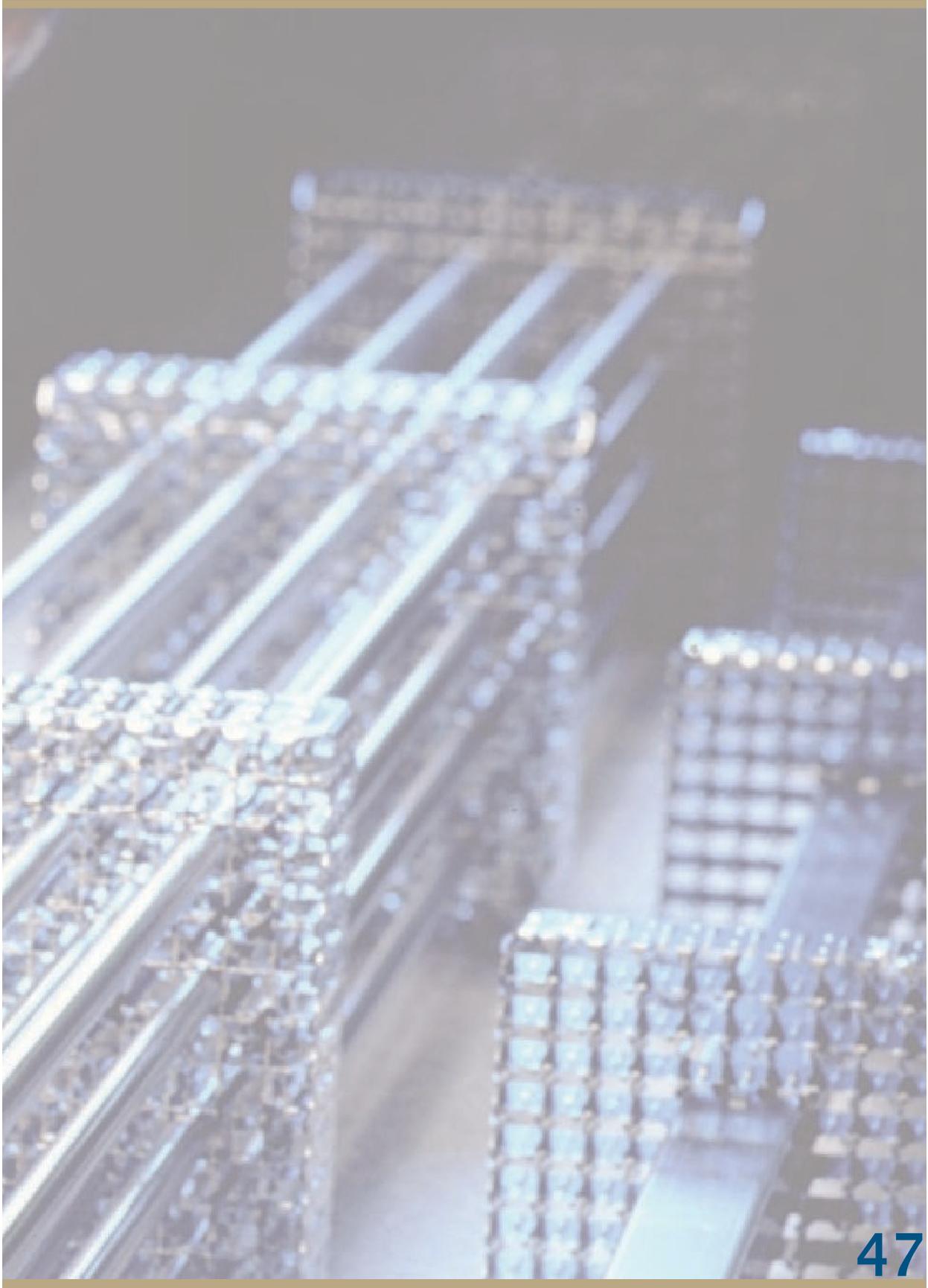
AED	Automatic External Defibrillator
C&A	certification and accreditation
CRGR	Committee to Review Generic Requirements
FEES	License Fee Billing System
FY	Fiscal Year
IAM	Issue Area Monitor
IG	Inspector General
IMPEP	Integrated Materials Performance Evaluation Program
MC&A	Material Control and Accounting
MD	Management Directive
MOX	Mixed Oxide
MURR	University of Missouri Research Reactor Center
NMED	Nuclear Material Events Database
NMSS	Office of Nuclear Material Safety and Safeguards (NRC)
NRC	U.S. Nuclear Regulatory Commission
NSIR	Office of Nuclear Security and Incident Response (NRC)
NSTS	National Source Tracking System
OE	Office of Enforcement (NRC)
OEP	Occupant Emergency Program
OGE	Office of Government Ethics
OIG	Office of the Inspector General (NRC)
PEKs	Personal Emergency Kits
SAIC	Science Applications International Corporation
RAI	request for additional information
SNM	special nuclear material
SPMS	Space and Property Management System



REPORTING REQUIREMENTS

The Inspector General Act of 1978, as amended (1988), specifies reporting requirements for semiannual reports. This index cross-references those requirements to the applicable pages where they are fulfilled in this report.

CITATION	REPORTING REQUIREMENTS	PAGE
Section 4(a)(2)	Review of Legislation and Regulations	6-9
Section 5(a)(1)	Significant Problems, Abuses, and Deficiencies	16-26, 31-35
Section 5(a)(2)	Recommendations for Corrective Action	16-26
Section 5(a)(3)	Prior Significant Recommendations Not Yet Completed	43-44
Section 5(a)(4)	Matters Referred to Prosecutive Authorities	37
Section 5(a)(5)	Information or Assistance Refused	None
Section 5(a)(6)	Listing of Audit Reports	38
Section 5(a)(7)	Summary of Significant Reports	16-26, 31-35
Section 5(a)(8)	Audit Reports — Questioned Costs	41
Section 5(a)(9)	Audit Reports — Funds Put to Better Use	42
Section 5(a)(10)	Audit Reports Issued Before Commencement of the Reporting Period for Which No Management Decision Has Been Made	43-44
Section 5(a)(11)	Significant Revised Management Decisions	None
Section 5(a)(12)	Significant Management Decisions With Which OIG Disagreed	None





NRC OIG'S STRATEGIC GOALS

1. Strengthen NRC's efforts to protect public health and safety and the environment.
2. Enhance NRC's efforts to increase security in response to an evolving threat environment.
3. Increase the economy, efficiency, and effectiveness with which NRC manages and exercises stewardship over its resources.



The NRC OIG Hotline

The Hotline Program provides NRC employees, other Government employees, licensee/utility employees, contractors and the public with a confidential means of reporting suspicious activity to the OIG. We do not attempt to identify persons contacting the Hotline.

What should be reported:

- Contract and Procurement Irregularities
- Conflicts of Interest
- Theft and Misuse of Property
- Travel Fraud
- Misconduct
- Abuse of Authority
- Misuse of Government Credit Card
- Time and Attendance Abuse
- Misuse of Information Technology Resources
- Program Mismanagement

Ways to Contact the OIG



Call:
OIG Hotline
1-800-233-3497
TDD: 1-800-270-2787
7:00 a.m. – 4:00 p.m. (EST)
After hours, please leave a message



Submit:
On-Line Form
www.nrc.gov
Click on Inspector General
Click on OIG Hotline



Write:
U.S. Nuclear Regulatory Commission
Office of the Inspector General
Hotline Program, MS O5 E13
11555 Rockville Pike
Rockville, MD 20852-2738