

U.S. NUCLEAR REGULATORY COMMISSION

FY 2004

PERFORMANCE AND ACCOUNTABILITY REPORT

MISSION

License and regulate the Nation's civilian use of byproduct, source, and special nuclear materials to ensure adequate protection of public health and safety, promote the common defense and security, and protect the environment.

VISION

Excellence in regulating the safe and secure use and management of radioactive materials for the public good.

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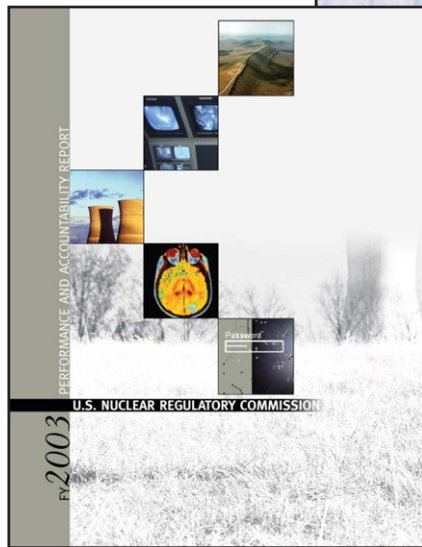
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John Hummel
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Bobby A. Detrick
 Bobby A. Detrick, CGFM
 2004-2005 National President



CHAPTER 1: MANAGEMENT'S DISCUSSION AND ANALYSIS



(From left to right) Commissioner Jeffrey S. Merrifield, Chairman Nils J. Diaz, and Commissioner Edward McGaffigan, Jr.

CHAPTER 1: MANAGEMENT'S DISCUSSION AND ANALYSIS

A MESSAGE FROM THE CHAIRMAN

I am pleased to present the Nuclear Regulatory Commission's *Performance and Accountability Report for FY 2004*. Ensuring the protection of public health and safety and the environment has always been the NRC's primary goal. I am proud to report that once again the NRC has achieved all of its safety performance goals. These results have been achieved through the application of the NRC's comprehensive safety framework, including defense-in-depth principles, as well as risk-informed and, where appropriate, performance-based regulation. I am also pleased to report that the NRC is positioning its resources and infrastructure to continue its strong oversight of existing facilities, and to review applications associated with new power reactors, high-level waste repository, and license renewals for existing facilities.



Security continues to be one of NRC's highest priorities. The NRC strengthened security at commercial nuclear facilities and augmented protection of the radioactive material it regulates. In requiring upgraded physical protection, access authorization, security force training and qualification, and safeguards-design standards and, in conducting new force-on-force exercises, improved emergency preparedness exercises, and continued partnerships with authorities at the Federal, State, local and international levels, the NRC has made significant progress in bolstering homeland security and preparedness. As a result, nuclear power plants continue to be among the best protected private sector facilities in the Nation.

One of my goals is to ensure that our resources are well managed and wisely used. This report provides information which demonstrates the prudent management of the funds entrusted to us by the American public and describes our successes in implementing the President's Management Agenda to promote a more efficient and effective Government.

The Reports Consolidation Act requires an assessment of the completeness and reliability of the program and financial data contained in this report based on evaluation criteria issued by the Office of Management and Budget. I conclude that the data are complete and reliable. In addition, the NRC has evaluated its management controls and financial management systems, as required by the Federal Managers' Financial Integrity Act. On the basis of our comprehensive

MANAGEMENT'S DISCUSSION AND ANALYSIS

management control program, I certify, with reasonable assurance, that the NRC is in compliance with the provisions of this act.

The NRC is committed to carrying out its regulatory responsibilities to enable the use and management of radioactive materials and nuclear fuel for beneficial civilian purposes in a manner that protects public health and safety and the environment, promotes the security of our Nation, and provides for regulatory actions that are open, effective, efficient, realistic and timely. The Commission is proud of this past fiscal year's accomplishments and looks forward to providing high-quality service to the American public in FY 2005 and beyond.



Nils J. Diaz

November 15, 2004



INTRODUCTION

INTRODUCTION

This Performance and Accountability Report represents the culmination of the U.S. Nuclear Regulatory Commission's (NRC) program and financial management processes, which began with mission and program planning, continued through the formulation and justification of NRC's budget to the President and the Congress, through budget execution, and ended with this report on our program performance and use of the resources entrusted to us. This report was prepared pursuant to the requirements of the Chief Financial Officers Act, as amended by the Reports Consolidation Act, and covers activities from October 1, 2003, to September 30, 2004.

Chapter 1, Management's Discussion and Analysis, provides an overview of the NRC. It consists of six sections: *About the NRC* describes the agency's mission, organizational structure, and regulatory responsibility; *Future Challenges* includes forward-looking information; *Program Performance Overview* discusses the agency's success in achieving its strategic goals; *President's Management Agenda* describes the agency progress in "Getting to Green" for the five management initiatives; *Financial Performance Overview* provides highlights of the NRC's financial position and audit results; and *Systems, Controls, and Legal Compliance* describes the agency's compliance with key legal and regulatory requirements.

ABOUT THE NRC

The NRC was established on January 19, 1975, as an independent Federal agency to regulate various commercial and institutional uses of nuclear materials. The NRC's purpose is defined by the Atomic Energy Act, as amended, and the Energy Reorganization Act, as amended. These acts provide the foundation for regulating the Nation's civilian uses of nuclear materials.

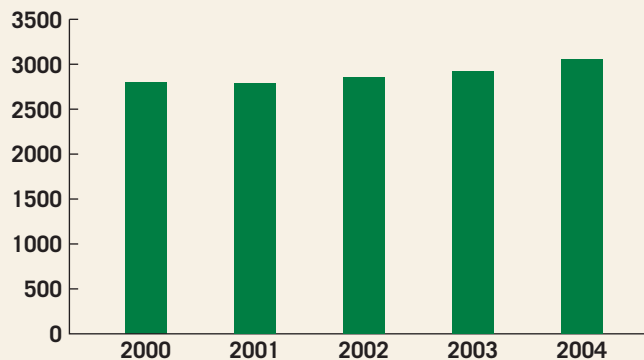
ORGANIZATION

The NRC is headed by a Commission composed of five members, with one member designated by the President to serve as Chairman. Each member is appointed by the President, with the advice and consent of the Senate, to serve 5 year terms. The Chairman serves as the principal executive officer and official spokesman for the Commission. The Executive Director for Operations carries out the program policies and decisions made by the Commission.

The NRC's headquarters is located in Rockville, Maryland. Four regional offices are located in King of Prussia, Pennsylvania; Atlanta, Georgia; Lisle, Illinois; and Arlington, Texas. The NRC's technical training center is located in Chattanooga, Tennessee. The NRC also has at least two resident inspectors at each nuclear power reactor site. The NRC's Operations Center

MANAGEMENT'S DISCUSSION AND ANALYSIS

NRC PERSONNEL CEILING FTE



is the focal point for NRC communications with its licensees, State agencies, and other Federal agencies concerning operating events in the commercial nuclear sector. The Operations Center is staffed 24 hours a day by NRC operations officers.

The NRC's budget for fiscal year (FY) 2004 was \$625.6 million and 3,040 full-time equivalent staff. The FY 2003 budget was \$584.6 million and 2,906 full-time equivalent staff. The NRC recovers most of its appropriations from fees paid by NRC licensees. Approximately 49 percent of the budget and 55 percent of the staff are for reactor safety.

REGULATORY RESPONSIBILITY

To fulfill its responsibility to protect the public health and safety, the NRC performs 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 regulatory requirements. These regulatory functions relate to nuclear power plants, other nuclear facilities, and other civilian uses of nuclear materials, such as nuclear medicine programs at hospitals; academic activities at educational institutions; research work; industrial applications, such as gauges and testing equipment; and the transport, storage, and disposal of nuclear materials and wastes. The NRC has aligned its regulatory programs into the following four strategic arenas.

Nuclear Reactor Safety encompasses all NRC efforts to ensure that civilian nuclear power reactor facilities, as well as test and research reactors, are operated in a manner that adequately protects public health and safety and the environment, and that safeguards special nuclear materials used in reactors.

Nuclear Materials Safety encompasses NRC efforts to ensure that nuclear fuel cycle facilities; and academic, industrial, and medical uses of nuclear materials are handled in a manner that adequately protects public health and safety and the environment, and protects against radiological sabotage and theft or diversion of special nuclear materials.



ABOUT THE NRC

Nuclear Waste Safety encompasses NRC efforts to ensure that the decommissioning of nuclear reactors and other facilities, storage of spent nuclear fuel, transportation of radioactive materials, and disposal of radioactive wastes are handled in a manner that adequately protects public health and safety and the environment, and protects against radiological sabotage and theft or diversion of special nuclear materials.

International Nuclear Safety Support encompasses international nuclear safety and regulatory policy formulation, import-export licensing for nuclear materials and equipment, treaty implementation, and international information exchange.

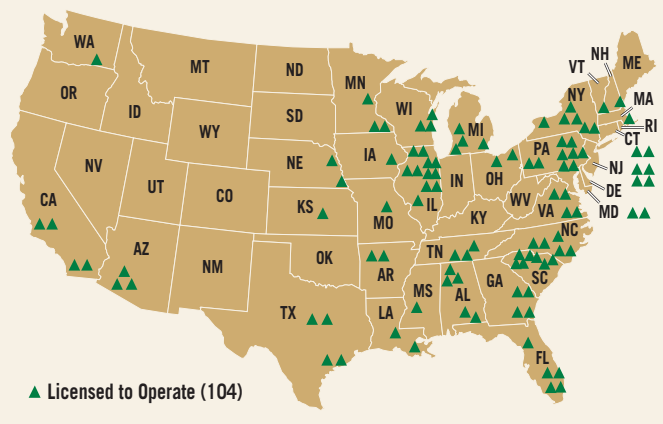
The NRC also carries out a **corporate management and support** function for information technology, financial management, human resources, and other support functions. Efforts in this area are aligned with the President's Management Agenda and focus on the five Governmentwide initiatives aimed at improving agency management.

Approximately 20 percent of the Nation's electricity is generated by 104 commercial nuclear reactors which are licensed by the NRC to operate in 31 States. Since 1992, nuclear electric generation has increased by approximately 21 percent. The NRC expends over 355,000 hours of inspection effort annually at 104 operating reactors and licenses approximately 4,500 reactor operators.

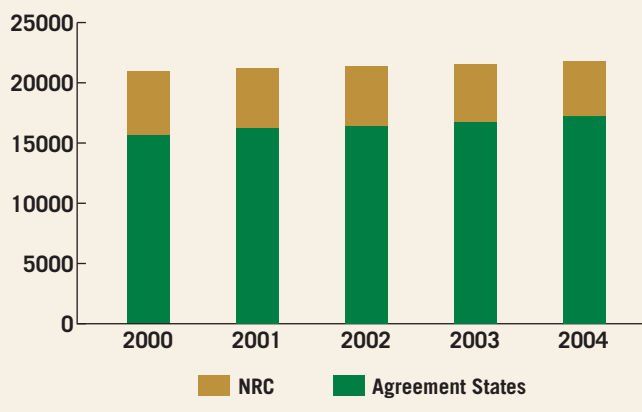
The NRC oversees approximately 4,500 licenses for medical, academic, industrial, and general uses of nuclear materials. The NRC conducts approximately 1,200 health and safety inspections of its nuclear materials licensees annually. Additionally, approximately 17,100 licenses are administered by the 33 States that participate in the NRC Agreement States Program, which authorizes the State to regulate the use of radioactive materials within that State. The NRC, Agreement States, and their licensees share a common responsibility to protect public health and safety.

The NRC places a high priority on keeping the public informed of its activities. Visit our Web site at www.nrc.gov to learn more about who we are and what we do to serve the American people.

U.S. COMMERCIAL NUCLEAR POWER REACTORS



U.S. MATERIALS LICENSES



MANAGEMENT'S DISCUSSION AND ANALYSIS

FUTURE CHALLENGES

The Commission is focused on addressing a number of significant challenges that will have a long-term impact in accomplishing its mission. The many industries that utilize radioactive materials are experiencing change, particularly in the areas of nuclear safety, security and emergency preparedness, risk-informed and performance based regulations, energy production, and waste management. In the next 5 years, the Nation is likely to see the following changes occur:

- NRC strategic initiatives will include continued emphasis on strengthening the interrelationship between safety, security, and emergency preparedness.
- The majority of operating nuclear power plants will have applied for license renewal to help meet the Nation's demand for energy production.
- The Department of Energy is expected to submit an application to construct and operate the Nation's high-level radioactive waste repository.
- Increasing quantities of radioactive waste may be transported and held in interim storage or permanent disposal sites.
- The nuclear power industry will show a growing interest in licensing and constructing new nuclear power plants and fuel cycle facilities (*e.g.*, gas centrifuge facilities and a mixed oxide fuel facility) to meet the Nation's demand for energy production.
- The NRC, Agreement States, and licensees will continue to devote increasing attention to the security of radioactive materials and facilities; in addition, the NRC will continue its nuclear non-proliferation activities.
- The NRC will continue to see an increase in requirements for coordination with a wide array of Federal, State, and local agencies related to homeland security and emergency planning.
- The number of Agreement States will increase, as will the numbers of medical, academic and industrial entities using radioactive materials under the oversight of the Agreement States.
- The regulatory climate is expected to adjust to both internal and external factors through the use of risk-informed and, as appropriate, performance-based regulations.



PROGRAM PERFORMANCE OVERVIEW

A backdrop to these industry-specific changes is one of elevated security and heightened public concern about safety. This has resulted in increased public dialogue about the uses of radioactive materials, varying from the potential for terrorist activities, to public concern about the adequacy of emergency preparedness plans for areas surrounding nuclear facilities. In this regard the NRC is committed to sharing openly with the public its information and decision-making processes consistent with the law and is committed to implementing regulatory processes that facilitate stakeholder involvement. While the NRC will continue to make as much information as possible available to the public, the agency will withhold information that could assist potential terrorists.

The manner in which the NRC regulates is also evolving. As the NRC continues to learn from operational experience and develops more effective ways of assessing risks and using risk-informed and performance based approaches founded in ‘realistic conservatism,’ the agency is better able to make appropriate safety decisions and to better allocate resources to areas where they will have the greatest positive effect. In addition, the NRC continues to seek improvement in effectiveness and efficiency. Toward that end, the agency is taking on specific management challenges that have been identified through ongoing program evaluations.

With respect to all facilities licensed by the NRC and Agreement States, the NRC is increasingly approaching safety, security, and emergency preparedness in an integrated manner. Safety requirements for structures, systems, components, programs, and people all contribute to both safety and security by making accidents unlikely and by making mitigation capability strong. In addition, safety and security requirements work together to make these facilities uninviting targets.

Ensuring the protection of public health and safety and the environment has always been, and continues to be, the NRC’s primary goal. Accordingly, safety is the most important consideration in evaluating license applications, licensee performance, and proposed changes to the regulatory framework. Because security is essential to the NRC’s mission and linked to safety, it also is an important consideration in the Agency’s actions. The Agency continuously works to improve its effectiveness and efficiency without conflicting with or undermining its safety and security mission.

PROGRAM PERFORMANCE OVERVIEW

Federal agencies provide an annual performance plan to Congress, setting goals with measurable target levels of performance based on the Government Performance and Results Act. The NRC evaluates its program performance within a structured planning, budgeting, and performance management process. As such, NRC has organized its strategic goals, performance goals, and strategies for achieving its mission into four strategic arenas. Our highest priority

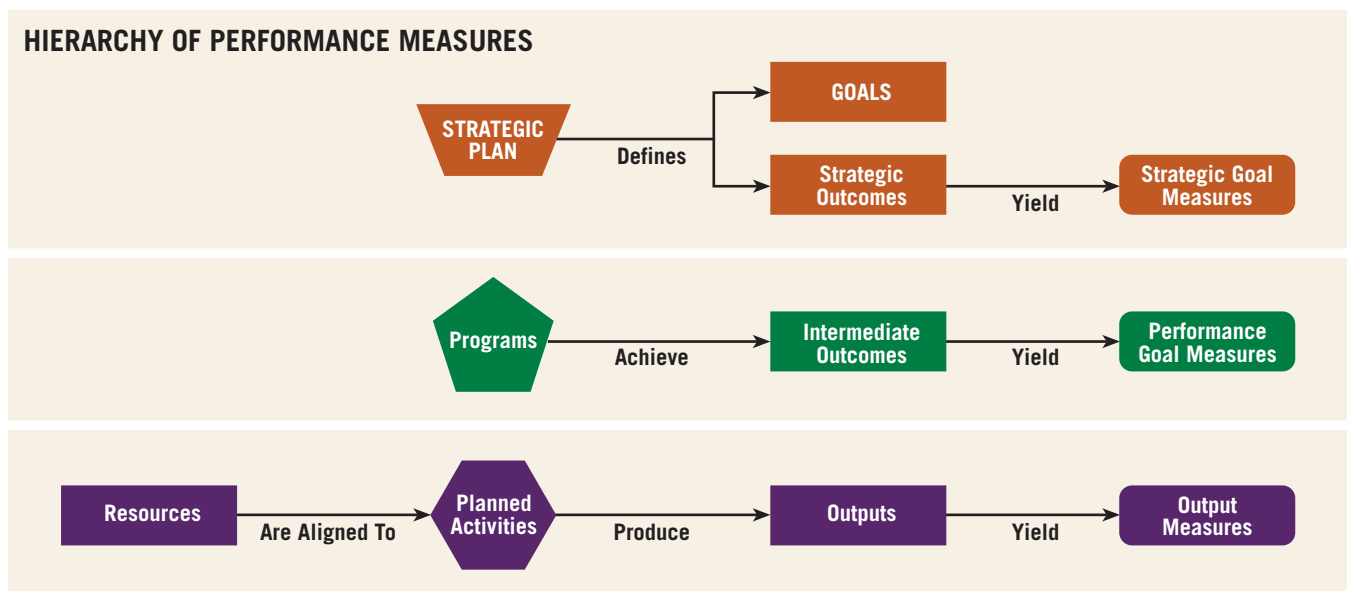
MANAGEMENT'S DISCUSSION AND ANALYSIS

is safety, and our strategic goals focus on the achievement of this priority. The NRC's FY 2000-FY 2005 Strategic Plan is available on the Web site <http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1614/v2/part1/>. The complete FY 2004 Performance Report is contained in Chapter 2: Program Performance.

ACHIEVING STRATEGIC GOAL RESULTS

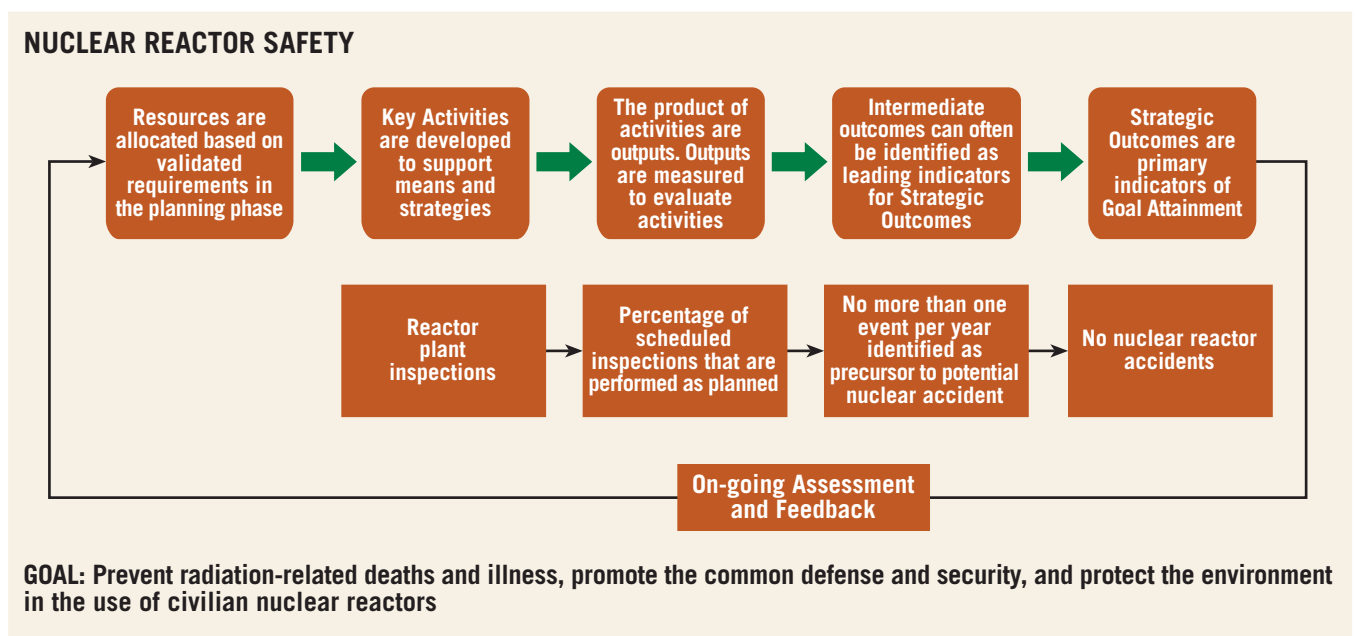
The NRC's performance management process approaches performance measurement as a layered process. As depicted in the diagram below, NRC's outputs are used to measure planned activities, intermediate outcomes are used to measure performance goals and strategic outcomes are used to measure achievement of the NRC's strategic goals. In the Performance and Accountability Report, the NRC reports mainly the results of strategic and performance goal measures. Selected output measures are used to identify significant accomplishments. However, output measures are most often reported in the NRC's annual performance budget.

The NRC's layered performance management approach links resources to planned activities, planned activities to programs, and programs to strategic goals. The associated measures inform management as to the efficiency of activities at the tactical level, the effectiveness of programs at the operational level and the attainment of goals at the strategic level.



PROGRAM PERFORMANCE OVERVIEW

The following example shows the relationship between NRC's reactor inspection activities and its strategic goal for nuclear reactor safety — Prevent radiation-related deaths and illness, promote the common defense and security, and protect the environment in the use of civilian nuclear reactors. In this example, resources are allocated to the planned activity, 'reactor plant inspections.' Key outputs from this planned activity support multiple intermediate outcomes (one is shown here as an example) and eventually the strategic outcome, 'no nuclear accidents.'



The NRC reports the output measures associated with the planned activity 'reactor plant inspections' in the annual performance budget. This level of reporting is focused on efficiencies at the working levels of the agency. The NRC reports the performance goal measures associated with the 'reactor inspection program,' and the strategic goal measures associated with the safety strategic outcome "no nuclear reactor accidents" in the NRC's annual Performance and Accountability Report.

During FY 2004, The NRC successfully met all strategic and performance goal targets for the four safety arenas. A brief summary of performance measurement follows here, with details contained in Chapter 2: Program Performance.

MANAGEMENT'S DISCUSSION AND ANALYSIS

NUCLEAR REACTOR SAFETY

Strategic Goal: Prevent radiation-related deaths and illnesses, promote the common defense and security, and protect the environment in the use of civilian nuclear reactors.

The NRC regulates 104 nuclear power reactors and 35 test and research reactors that are currently licensed to operate. Of these licensed reactors, the nuclear power plants generate approximately 20 percent of the Nation's electricity, while test and research reactors are used to safely conduct research and development. During FY 2004, the NRC met all five of the strategic goal measures for this arena. NRC completed 1,741 licensing actions during FY 2004 in support of the Nuclear Reactor Safety Goal.

NUCLEAR MATERIALS SAFETY

Strategic Goal: Prevent radiation-related deaths and illnesses, promote the common defense and security, and protect the environment in the use of source, byproduct, and special nuclear material.

The Nuclear Materials Safety program encompasses NRC-regulated aspects of nuclear fuel cycle facilities and nuclear materials activities. The NRC and 33 Agreement States regulate more than 20,000 specific and 150,000 general licensees. The Materials Users License and Inspection Program currently regulates and inspects approximately 4,500 specific licensees for the use of nuclear byproduct and other radioactive materials. For FY 2004, the NRC met all four of its strategic goal measures for this arena.

NUCLEAR WASTE SAFETY

Strategic Goal: Prevent significant adverse impacts from radioactive waste to the current and future public health and safety and the environment, and promote the common defense and security.

Nuclear Waste Safety encompasses regulatory activities associated with the decommissioning of nuclear reactors and other facilities, storage of spent nuclear fuel, transportation of radioactive materials, and disposal of radioactive waste. For FY 2004, the NRC met all four of its strategic goal measures for this arena. The NRC continued to build and refine the regulatory framework for evaluating the license application for the proposed Yucca Mountain Repository. This included certifying the NRC's documentary material for the purposes of the Licensing Support Network.



PRESIDENT'S MANAGEMENT AGENDA

INTERNATIONAL NUCLEAR SAFETY SUPPORT

Strategic Goal: Support U.S. interests in the safe and secure use of nuclear materials and in nuclear nonproliferation.

International Nuclear Safety Support encompasses international nuclear policy formulation, export-import licensing for nuclear materials and equipment, treaty implementation, nuclear proliferation deterrence, international safety assistance, and safeguards support and assistance. For FY 2004, the NRC met all three measures established for this arena. During FY 2004, the NRC furnished its extensive regulatory experience to other nations' nuclear safety and security efforts. This included collaborating in the finalization of the International Atomic Energy Agency (IAEA) Code of Conduct for the Safety and Security of Radioactive Sources. NRC also contributed to development of the international guidance document for the import/export of high-risk radioactive sources.

PRESIDENT'S MANAGEMENT AGENDA

The Governmentwide initiatives of the President's Management Agenda are intended to make Government more citizen-centered, results-oriented, and market-based and to actively promote competition. The five Governmentwide initiatives are: (1) Strategic Management of Human Capital, (2) Competitive Sourcing, (3) Improved Financial Management, (4) Expanded E-Government, and (5) Budget and Performance Integration. The NRC is actively implementing the agenda to improve the management and performance of the Federal Government. Chapter 2 of this report discusses our accomplishments in these important areas.

FINANCIAL PERFORMANCE OVERVIEW

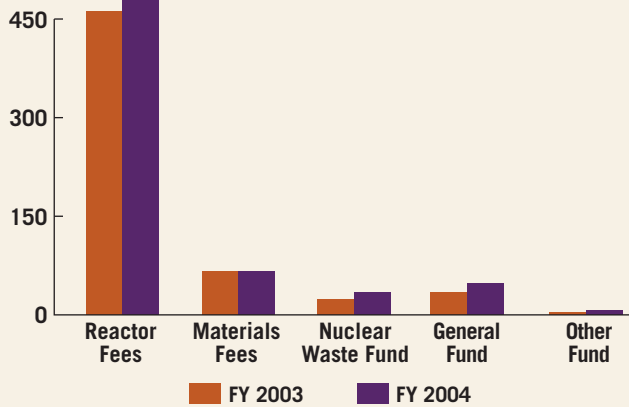
As of September 30, 2004, and 2003, the financial condition of the NRC was sound with respect to having sufficient funds to meet program needs and adequate control of these funds in place to ensure obligations did not exceed budget authority. The NRC prepared its financial statements in accordance with the accounting standards codified in the Statements of Federal Financial Accounting Standards (SFFAS) and Office of Management and Budget (OMB) Bulletin No. 01-09, *Form and Content of Agency Financial Statements*.

SOURCES OF FUNDS

The NRC has two appropriations, Salaries and Expenses and Office of the Inspector General (OIG), and funds for both appropriations are available until expended. The NRC's total new

MANAGEMENT'S DISCUSSION AND ANALYSIS

SOURCES OF FUNDS in millions

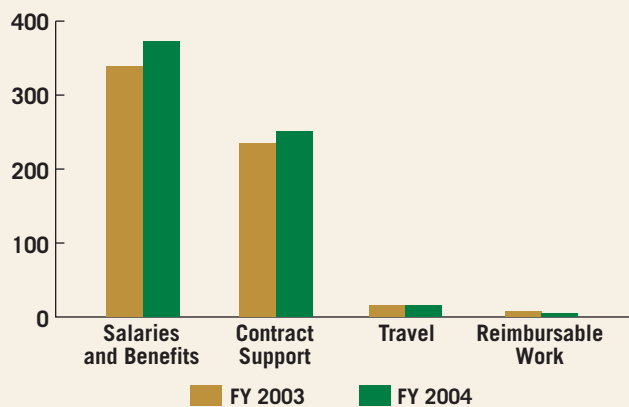


FY 2004 budget authority was \$625.6 million. Of this amount, \$618.3 million is for the Salaries and Expenses appropriation and \$7.3 million is for the Office of the Inspector General appropriation. This represents an increase in new budget authority of \$41.0 million over FY 2003 (\$40.5 million for the Salaries and Expenses appropriation and \$0.5 million for the Office of the Inspector General appropriation). In addition, \$43.5 million from prior year appropriations, \$3.7 million from prior year reimbursable work, and \$8.8 million for new reimbursable work to be performed for others was available to obligate in FY 2004. The sum of all funds available to obligate for FY 2004 was \$681.6 million, which is a \$44.2 million increase over the FY 2003 amount of \$637.4 million.

The Omnibus Budget Reconciliation Act of 1990 (OBRA-90), as amended, required the NRC to collect fees to offset approximately 92 percent of its new budget authority, less the amount appropriated to the NRC from the Nuclear Waste Fund for FY 2004. The NRC collected \$547.3 million in FY 2004. This is 100 percent of the recovery requirement. For FY 2003, OBRA-90 required NRC to collect approximately 94 percent of its new budget authority, excluding appropriations from the Nuclear Waste Fund.

USES OF FUNDS BY FUNCTION

USES OF FUNDS BY FUNCTION in millions



The NRC incurred obligations of \$645.3 million, which was an increase of \$48.3 million over FY 2003. Approximately 58 percent of obligations were used for salaries and benefits. The remaining 42 percent was used to obtain technical assistance for the NRC's principal regulatory programs, to conduct confirmatory safety research, to cover operating expenses, (e.g., building rentals, transportation, printing, security services, supplies, office automation, training), staff travel, and reimbursable work. The unobligated budget authority available at the end of FY 2004 was \$36.3 million, which is a decrease compared to the FY 2003 amount of \$40.4 million. Of this \$36.3 million, \$6.5 million is for reimbursable work and \$29.8 million is available to fund critical NRC needs in FY 2005.



FINANCIAL PERFORMANCE OVERVIEW

AUDIT RESULTS

The NRC received an unqualified audit opinion on its FY 2004 financial statements and a qualified opinion on its restated FY 2003 financial statements. The auditors identified one material internal control weakness concerning the Fee Billing System. This weakness was also identified as a substantial noncompliance with the Federal Financial Management Improvement Act (Improvement Act). The agency is developing its corrective action and remediation plans to address the auditor's identified material weakness and the substantial noncompliance.

In addition to the material weakness, the auditors identified two new reportable conditions concerning user organization compensating controls and fee recovery from licensees. The auditors closed three of the five prior-year reportable conditions concerning contract close-out processing procedures, information systems security access, and sustaining management controls over cost accounting. The remaining two reportable conditions concern the development of the hourly rate for license fees and accounting for internal use software. The agency expects to fully implement corrective action during FY 2005 for the internal use software condition and to complete corrective action for the hourly rate for license fees during FY 2006.

FINANCIAL STATEMENT HIGHLIGHTS

The NRC's financial statements summarize the financial activity and financial position of the agency. The NRC's FY 2003 financial statements have been restated to reflect an under statement of accounts receivable and revenue of approximately \$3 million from license fee billings and \$777 thousand in FY 2002 capital leases not previously recorded, and a reclassification of unfilled customer orders of \$4.7 million. The financial statements, footnotes, and the balance of the required supplementary information, appear in Chapter 3: Auditors' Report and Financial Statements. Analysis of the principal statements follows.

ANALYSIS OF THE BALANCE SHEET

The NRC's assets were approximately \$283.3 million as of September 30, 2004. This is an increase of \$3.5 million from the end of FY 2003. The assets reported in NRC's Balance Sheet are summarized in the accompanying table.

The Fund Balance with Treasury represents the NRC's largest asset of \$200.3 million as of September 30, 2004, an increase of \$6.9 million from the FY 2003 year-end balance. This balance accounts for approximately 71 percent of total assets

ASSET SUMMARY (in millions)		
	FY 2004	FY 2003 Restated
Fund Balance with Treasury	\$200.3	\$193.4
Accounts Receivable, Net	54.0	53.2
Property, Plant, & Equipment, Net	26.7	30.2
Other	2.3	3.0
Total Assets	\$283.3	\$279.8

MANAGEMENT'S DISCUSSION AND ANALYSIS

and represents appropriated funds, collected license fees, and other funds maintained at the U.S. Treasury to pay current liabilities.

Accounts Receivable, Net, as of September 30, 2004, was \$54.0 million and includes an offsetting allowance for doubtful accounts of \$2.1 million. This is a 2 percent increase from the FY 2003 year-end Accounts Receivable, Net, balance of \$53.2 million. Accounts Receivable Due from the Public was \$50.6 million, representing 18 percent of total assets.

The value of Property, Plant, and Equipment, Net, was \$26.7 million, representing 9 percent of total assets. The majority of the balance is comprised of nuclear reactor simulators, leasehold improvements, and computer hardware and software.

LIABILITIES SUMMARY (in millions)		
	FY 2004	FY 2003 Restated
Accounts Payable	\$27.9	\$27.3
Federal Employee Benefits	8.1	9.1
Other Liabilities	109.9	101.8
Total Liabilities	\$145.9	\$138.2

The NRC's liabilities were \$145.9 million as of September 30, 2004. The accompanying table shows an increase in Total Liabilities of \$7.7 million from the FY 2003 year-end balance of \$138.2 million. Other Liabilities include \$53.7 million for recoveries from unbilled accounts receivable, \$13.0 million for accrued salaries to employees, and \$32.2 million for accrued annual leave. Of the agency's liabilities, \$42.0 million were not covered by budgetary resources, which is a slight increase over the balance as of September 30, 2003. Liabilities not covered by budgetary resources are unfunded pension expenses, accrued annual leave, and future

workers' compensation. The Federal budget process does not recognize the cost of future benefits for today's employees. Instead, the Federal budget process recognizes those costs in future years when they are actually paid.

NET POSITION SUMMARY (in millions)		
	FY 2004	FY 2003 Restated
Unexpended Appropriations	\$149.9	\$149.7
Cumulative Results of Operations	(12.5)	(8.1)
Total Net Position	\$137.4	\$141.6

The difference between total assets and total liabilities, net position, was \$137.4 million as of September 30, 2004. This is a decrease of \$4.2 million from the FY 2003 year-end balance. Unexpended Appropriations is the amount of authority granted by Congress that has not been expended. Cumulative Results of Operations represent net results of operations since the NRC's inception. The decrease is primarily the result of a \$3.5 million decrease in Property, Plant, and Equipment, Net.



FINANCIAL PERFORMANCE OVERVIEW

ANALYSIS OF THE STATEMENT OF NET COST

The Statement of Net Cost presents the net cost of NRC's four strategic arenas as identified in the NRC Annual Performance Plan. The purpose of this statement is to link program performance to the cost of programs. The NRC's net cost of operations for the year ended September 30, 2004, was \$110.5 million, which is an increase of \$49.8 million over the restated FY 2003 net cost of \$60.7 million. The greater percentage of this increase is due to an increase in gross costs in the Nuclear Reactor Safety arena pertaining to an increase in salaries, benefits, and contract costs. Net costs by strategic arena are shown in the accompanying table.

Total exchange revenue for the year ended September 30, 2004, was \$552.2 million, which is an increase of \$11.7 million over the exchange revenue of \$540.5 million for the year ended September 30, 2003. Exchange revenue is derived from fees for licensing inspections, other services, and annual fees assessed in accordance with 10 CFR Parts 170 and 171. The greater percentage of the increase occurred in the Nuclear Reactor Safety arena pertaining to Part 170 inspections.

NET COST OF OPERATIONS (in millions)		
	FY 2004	FY 2003 Restated
Nuclear Reactor Safety	\$(26.3)	\$(64.4)
Nuclear Materials Safety	40.2	33.5
Nuclear Waste Safety	82.2	77.6
International Nuclear Safety Support	14.4	14.0
Net Cost of Operations	\$110.5	\$60.7

ANALYSIS OF STATEMENT OF CHANGES IN NET POSITION

The Statement of Changes in Net Position reports the change in net position during the reporting period. Net position is affected by changes in its two components—Cumulative Results of Operations and Unexpended Appropriations. The decrease in Net Position of \$4.2 million from FY 2003 to FY 2004 is due primarily from the net change in Cumulative Results of Operations of \$4.4 million due to increase in investment in Property, Plant, and Equipment.

Analysis of the Statement of Budgetary Resources

The Statement of Budgetary Resources shows the sources of budgetary resources available and the status at the end of the period. It presents the relationship between budget authority and budget outlays, and reconciles obligations to total outlays. For FY 2004, NRC had Total Budgetary Resources available of \$681.3 million, the majority of which was derived from new budget authority. This represents a 7 percent increase over FY 2003 budgetary resources available of \$637.4 million.

MANAGEMENT'S DISCUSSION AND ANALYSIS

For FY 2004, the Status of Budgetary Resources showed the NRC incurred obligations of \$645.3 million, or 95 percent of funds available. This is comparable to FY 2003 obligations of \$597 million, at 94 percent of funds available. Total Outlays for FY 2004 were \$616.6 million, which represents a \$42.2 million increase from FY 2003 total Outlays of \$574.3 million.

Analysis of the Statement of Financing

The Statement of Financing is designed to provide the bridge between accrual-based (financial accounting) information in the Statement of Net Cost and obligation-based (budgetary accounting) information in the Statement of Budgetary Resources by reporting the differences and reconciling the two statements. This reconciliation ensures that the proprietary and budgetary accounts in the financial management system are in balance. The Statement of Financing takes Budgetary Obligations of \$645.3 million and reconciles to the Net Cost of Operations of \$110.5 million by deducting non-budgetary resources, costs not requiring resources, and financing sources yet to be provided.

SYSTEMS, CONTROLS, AND LEGAL COMPLIANCE

This section provides information on NRC's compliance with the:

- Federal Managers' Financial Integrity Act
- Federal Financial Management Improvement Act
- Prompt Payment Act
- Debt Collection Improvement Act
- Biennial Review of User Fees
- Inspector General Act
- Other key legal and regulatory requirements



SYSTEMS, CONTROLS, AND LEGAL COMPLIANCE

FEDERAL MANAGERS' FINANCIAL INTEGRITY ACT

The Federal Managers' Financial Integrity Act (Integrity Act) mandates that agencies establish controls that reasonably ensure that: (i) obligations and costs comply with applicable law; (ii) assets are safeguarded against waste, loss, unauthorized use, or misappropriation; and (iii) revenues and expenditures are properly recorded and accounted for. This act encompasses program, operational, and administrative areas as well as accounting and financial management. It also requires the Chairman to provide an assurance statement on the adequacy of management controls and conformance of financial systems with Governmentwide standards.

MANAGEMENT CONTROL REVIEW PROGRAM

Managers throughout the NRC are responsible for ensuring that effective controls are implemented in their areas of responsibilities. Each office director and regional administrator prepared an annual assurance statement that identified any control weaknesses that required the attention of the NRC's Executive Committee on Management Controls. These statements were based on various sources and included:

- Management knowledge gained from the daily operation of agency programs and reviews.
- Management reviews.
- Program evaluations.
- Audits of financial statements.
- Reviews of financial systems.
- Annual performance plans.
- Inspector General and Government Accountability Office reports.
- Reports and other information provided by the congressional committees of jurisdiction.

The NRC's Executive Committee on Management Controls is comprised of senior executives from offices of the Chief Financial Officer and the Executive Director of Operations, with the General Counsel and the Inspector General participating as advisors. The committee met and



INTEGRITY ACT STATEMENT

The U.S. Nuclear Regulatory Commission evaluated its management controls and financial management systems for FY 2004, as required by the Federal Managers' Financial Integrity Act. On the basis of the NRC's comprehensive management control program, I certify, with reasonable assurance, that the agency is in compliance with the provisions of this act.

A handwritten signature in black ink, appearing to read "Nils J. Diaz".

Nils J. Diaz
Chairman
U.S. Nuclear Regulatory Commission
November 15, 2004

MANAGEMENT'S DISCUSSION AND ANALYSIS

reviewed these individual assurance statements. The committee then advised the Chairman whether the NRC had any management control deficiencies serious enough to be reported as a material weakness or material noncompliance.

The NRC's ongoing management control program requires, among other things, that management control deficiencies are integrated into offices' and regions' annual operating plans. The operating plan process has provisions for periodic updates and for attention from senior managers. The management control information in these plans, combined with the individual assurance statements discussed previously, provides the framework for monitoring and improving the agency's management controls on an ongoing basis.

FY 2004 INTEGRITY ACT RESULTS

The NRC evaluated its management control systems for the fiscal year ending September 30, 2004. This evaluation provided reasonable assurance that the agency's management controls achieved their intended objectives. As a result, management concluded that the NRC did not have any material weaknesses, as defined by the Integrity Act, in its programmatic or administrative activities. The Fee Billing System was identified as a significant management control weakness and was of sufficient importance to merit the close attention of senior management.

FEDERAL FINANCIAL MANAGEMENT IMPROVEMENT ACT

The Improvement Act requires each agency to implement and maintain systems that comply substantially with: (i) Federal financial management system requirements, (ii) applicable Federal accounting standards, and (iii) the standard general ledger at the transaction level. The act requires the Chairman to determine whether the agency's financial management systems comply with the Improvement Act and to develop remediation plans for systems that do not comply.

FY 2004 IMPROVEMENT ACT RESULTS

As of September 30, 2004, the NRC evaluated its financial systems to determine if they complied with applicable Federal requirements and accounting standards required by the Improvement Act. The following seven systems were evaluated: the Federal Financial System, Human Resources Management System, Cost Accounting System, Advice of Allotments/Financial Plan, Capitalized Property System, Fee Billing System, and Controller Resource Database System.



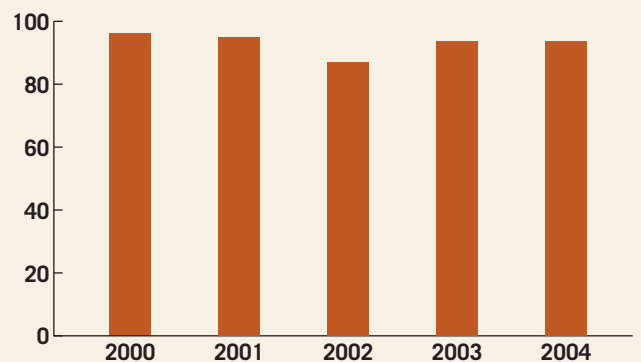
SYSTEMS, CONTROLS, AND LEGAL COMPLIANCE

The Chairman of the NRC determined that as of September 30, 2004, NRC financial management systems were in substantial compliance with the Improvement Act, except for the Fee Billing System which is in substantial noncompliance with Federal financial management system requirements. In making his determination, the Chairman considered all the information available to him, including the NRC Executive Committee on Management Control's report on the effectiveness of internal controls and OIG audit reports. He also considered the results of the financial management systems reviews conducted by the agency.

PROMPT PAYMENT

The Prompt Payment Act requires Federal agencies to make timely payments to vendors for supplies and services, to pay interest penalties when payments are made after the due date, and to take cash discounts when they are economically justified. From FY 2003 to FY 2004, the NRC had an increase of 1,042 invoices (from 8,128 to 9,170) that were paid and subject to the Prompt Payment Act. The NRC has remained at 94 percent of on-time payments subject to the Prompt Payment Act from FY 2003 to FY 2004. The amount of interest penalties incurred during FY 2004 was \$2,917, which is a slight decrease from FY 2003's amount of \$2,927. The agency continued to make over 99 percent of its vendor payments electronically.

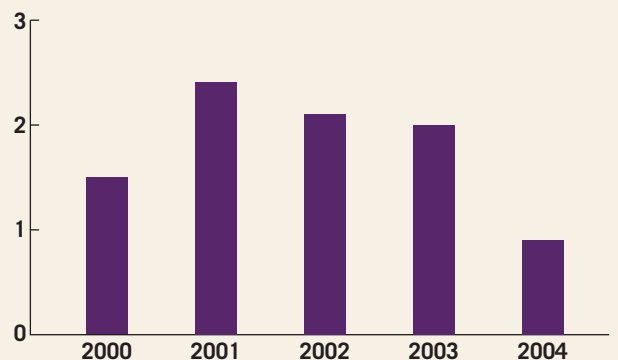
PROMPT PAYMENT Percent of On-Time Payments



DEBT COLLECTION

The Debt Collection Improvement Act is intended to enhance the ability of the Federal Government to service and collect debts. The agency's goal is to maintain the delinquent debt owed to the NRC, at year end to less than one percent of its annual billings. The NRC continues to meet this goal and has kept delinquent debt to less than one percent for the past 9 years. Delinquent debt at the end of FY 2004 was \$0.9 million. This is a decrease of \$1.1 million over FY 2003 and a decrease in the number of outstanding receivables from 233 to 154. The NRC continues to aggressively pursue the collection of delinquent debt and continues to timely refer all eligible delinquent debt over 180 days to the U.S. Treasury for collection.

DELINQUENT DEBT In Millions



MANAGEMENT'S DISCUSSION AND ANALYSIS

BIENNIAL REVIEW OF USER FEES

The Chief Financial Officers Act requires agencies to conduct a biennial review of fees, royalties, rents, and other charges imposed by agencies, and make revisions to cover program and administrative costs incurred. During FY 2004, the NRC reviewed its fees subject to the biennial review requirement. Each year, the NRC revises the hourly rates for license and inspection fees and adjusts the annual fees to meet the fee collection requirements of the Omnibus Budget Reconciliation Act of 1990, as amended.

The most recent changes to the license, inspection, and annual fees are described in the *Federal Register* (68 FR 36714, June 18, 2003). The fees and charges for the Criminal History Program were also revised to more appropriately recognize actual costs. Reviews of other types of fees were not warranted at this time.

TREASURY PERFORMANCE MEASURE SUMMARY

Treasury has five key elements for measuring how agencies complied with reporting requirements for the Federal Agencies Centralized Trial Balance Statement (FACTS I) and intragovernmental activity. Overall for FY 2003, the NRC complied with the five reporting elements for timely reporting, reconciliation of beginning and ending net position differences, reliability of FACTS I reporting, consistency of audited financial statements to FACTS I reporting, and intragovernmental activity for elimination of differences. Treasury has not issued its FY 2004 Performance Measure Summary; however, based on our self-evaluation, NRC also met the requirements for this fiscal year.

INSPECTOR GENERAL ACT

The agency has established and continues to maintain an excellent record in resolving and implementing open audit recommendations presented in Office of the Inspector General (OIG) reports. Section 5(b) of the Inspector General Act requires agencies to report on final actions taken on OIG audit recommendations. This information as well as data concerning disallowed costs determined through contract audits conducted by the Defense Contract Audit Agency can be found in Appendix C.



SYSTEMS, CONTROLS, AND LEGAL COMPLIANCE

IMPROPER PAYMENTS

Improper payments continue to be at low risk for the agency. The NRC continues to evaluate its internal controls to guard against improper payments and monitors and reports on all improper payments within its programs. At the present time, NRC's inventory of functional payment areas consists of commercial vendor, interagency, and travel payments. The Department of Interior's Federal Personnel/Payroll System became the NRC system of record for payroll disbursements effective November 2, 2003. The Department of Interior's National Business Center is responsible for monitoring and reporting on any improper payroll-related payments. The NRC will continue to perform annual risk assessments for each of these areas. Based on the FY 2004 risk assessments the reporting requirement is not applicable since each of these programs were well within the OMB guidance on what is considered to be a significant risk.

MANAGEMENT'S DISCUSSION AND ANALYSIS



CHAPTER 2: PROGRAM PERFORMANCE

CHAPTER 2: PROGRAM PERFORMANCE

MEASURING AND REPORTING OUR PERFORMANCE

This chapter presents information on the program-specific performance of the U.S. Nuclear Regulatory Commission (NRC) during fiscal year (FY) 2004. The presentation begins with a discussion of the NRC's performance measurement system and alignment of resources to strategic goals, followed by a discussion of the homeland security and safeguards programs, a summary of the NRC's program performance for Nuclear Reactor Safety, Nuclear Materials Safety, Nuclear Waste Safety, and International Nuclear Safety Support. Within each program, the discussion of performance includes an overview of the agency's key initiatives and some of our major accomplishments. The discussion also includes program-specific performance results for NRC goals and measures, along with relevant budget information and the results of all program evaluations or studies completed during FY 2004.

Following the program-specific discussions, this chapter describes the NRC's progress in "Getting to the Green" for the five management initiatives identified in the President's Management Agenda. Finally, this chapter briefly discusses the sources and quality of data presented in this report, with a particular focus on the methods the NRC uses to collect and analyze data, ensure data security, and improve the agency's performance measures and data during the current reporting period. Endnotes are referenced throughout the data presentation and located in an "Endnotes" section at the end of the report. The endnotes provide definitions and clarify technical terms in the data.

OUR PERFORMANCE MEASUREMENT SYSTEM

The NRC's performance measurement system includes both strategic goals and strategic goal measures, as well as performance goals and performance goal measures. The strategic goals represent the agency's mission and reflect the overall outcomes to be achieved. The performance goals focus on outcomes which are key contributors to achieving the agency's strategic goals.

BUDGET AUTHORITY BY PROGRAM in millions



DISTRIBUTION OF EMPLOYEES BY PROGRAM



PROGRAM PERFORMANCE

The performance measures associated with each strategic and performance goal indicate how effectively the NRC is achieving its goals and establish the basis for performance management. The measures also establish how far and how fast the agency will move in the direction established by the goals. The NRC has recently completed the triennial update of the agency's Strategic Plan, and is currently reviewing performance measures to determine whether the agency can find more effective ways to measure and report our performance to the American public.

ALIGNING RESOURCES TO GOALS

Collectively, the outcome-based performance goals are the key indicators for successful progress in achieving the agency's strategic goals. The performance goals and their associated measures reflect the agency's move toward more outcome-based performance. Agency work (programs and activities) is being planned, managed, monitored, and assessed according to contributions to the achievement of these performance goals, with public health and safety and common defense and security as the primary consideration. Ongoing program evaluations will form the basis to identify whether existing programs are successfully achieving the goals or whether revised or new initiatives are needed.

Planned activities are established to support four major programs that are aligned with the four strategic goals of the agency; Nuclear Reactor Safety, Nuclear Materials Safety, Nuclear Waste Safety, and International Nuclear Safety Support. Resources are aligned with these four programs in order to accomplish the work necessary to achieve the outcomes associated with the strategic goals of the agency.

FUTURE IMPROVEMENTS IN PERFORMANCE MANAGEMENT

The performance measurement information contained in the FY 2004 Performance and Accountability Report (PAR) complies with current Office of Management and Budget (OMB) guidance and displays substantial progress in integrating performance management and budget processes across the agency. The NRC released an updated Strategic Plan on August 12, 2004. Future performance reports will continue to integrate performance management and budget by aligning agency resources with the goals of safety, security, openness, effectiveness and management in the new Strategic Plan.

PERFORMANCE DATA COMPLETENESS AND RELIABILITY

In order to manage for results, it is essential for the NRC to assess the completeness and reliability of our performance data. Comparisons of actual performance with the projected levels are possible only if the data used to measure performance are complete and reliable. Consequently,



HOMELAND SECURITY

the Reports Consolidation Act of 2000 requires the Chairman of the NRC to assess the completeness and reliability of the performance data used in this report. In addition, the Office of Management and Budget Circular No. A-11 specifically describes how Federal agencies should assess the completeness and reliability of their performance data.

DATA COMPLETENESS

The Office of Management and Budget considers data to be complete if an agency reports actual performance data for every performance goal and indicator in the annual plan. Actual performance data may include preliminary data if those are the only data available when the agency sends its report to the President and Congress. The data presented in this report meet these requirements for data completeness, in that we have reported actual or preliminary data for every strategic and performance goal measure.

The actual data for strategic and performance goal measures covers the entire fiscal year for 2004 unless otherwise noted in the Performance Report.

DATA RELIABILITY

The OMB considers data to be reliable when agency managers and decision-makers do not demonstrate either a refusal or a marked reluctance to use the data in carrying out their responsibilities. The data presented in this report meet this requirement for data reliability, in that the NRC's managers and decision-makers regularly use the reported data on an ongoing basis in the course of their duties.

HOMELAND SECURITY

OVERVIEW

For over 25 years, the NRC has required its licensees to maintain adequate safeguards of radioactive materials through rigorous security programs. In response to the terrorist attacks on September 11, 2001, the Commission launched a comprehensive evaluation of the security and safeguards programs of nuclear power plants, nuclear materials, fuel cycle and waste facilities, spent fuel storage and transportation, and activities involving the transportation of non-spent fuel radioactive material.

As a result, the NRC and its licensees have taken many significant actions to enhance the security of licensed activities and contribute to the Nation's common defense and security consistent with the existing threat environment. In FY 2004, the NRC continued using a

PROGRAM PERFORMANCE

risk-informed approach to establish the security and safeguards requirements for licensed materials. In particular, the Commission issued orders to certain NRC and Agreement State licensees to enhance security further by requiring the licensees to adopt additional security measures. Although licensees had already voluntarily implemented many of the new measures, the Orders issued in FY 2004 provided the means to make those measures legally binding and to ensure consistent implementation.

ENHANCING SECURITY FOR CHANGES IN THE THREAT ENVIRONMENT

The NRC continues to enhance the level of security at nuclear power reactors by requiring upgraded security in the areas of physical protection; access authorization (including improved background checks); security force training, qualification, and work hours; and protection against a revised design-basis threat. In order to ensure prompt and flexible enhancements to security, the NRC continues to issue advisories to notify licensees of short-term changes in the threat environment. The Commission used these advisories as a tool to alert licensees to the potential threats posed by terrorist attacks. The agency will continue to use this approach to achieve prompt actions, as required in the future. The NRC maintains appropriate security enhancements by issuing orders that require certain categories of licensees to upgrade their security programs.

The NRC achieves agencywide enhancements to security through primary vulnerability assessments, protection of sensitive information, emergency preparedness and incident response, coordination with other federal organizations, and international efforts. The following sections discuss the NRC's significant accomplishments in these key areas.

VULNERABILITY ASSESSMENTS

The NRC has assessed the potential for and consequences of terrorists targeting a nuclear power plant for aircraft attack, the physical effects of such a strike, and compounding factors such as meteorology that would affect the impact of potential radioactive releases. As a result of these preliminary assessments, the NRC required that nuclear power plant licensees implement enhancements to mitigate potential consequences in the unlikely event of a successful attack on a nuclear power plant. Additionally, the NRC conducted detailed site-specific engineering studies of a limited number of nuclear power plants to assess potential vulnerabilities to deliberate attacks involving large commercial aircraft. For the facilities analyzed, the vulnerability studies confirm that the likelihood of both damaging the reactor core and releasing radioactivity that could affect public health and safety is low. Additional site-specific studies of operating nuclear power plants are underway or being planned to determine the need, if any, for additional mitigating capability on a site-specific basis.



HOMELAND SECURITY

The NRC continues to assess nuclear facilities and nuclear materials to identify potential vulnerabilities to a series of land-based, waterborne, and cyber assaults. For example, the NRC is also extensively involved in industry and government interagency working groups to identify technologies that may prove beneficial for securing reactor sites and the Nation's electrical power grid. Further NRC efforts will yield the technical bases for future regulatory decisions, including risk mitigation measures associated with specific types of attacks on power reactor facilities, spent fuel pools, spent fuel storage and transportation casks, and certain radioactive material transportation packages.

The NRC developed a self-assessment methodology for cyber vulnerabilities. The NRC is currently working with the nuclear industry to apply that methodology and mitigate risk-significant vulnerabilities. The NRC is developing guidance for cyber-security inspections based on the results of the cyber vulnerability self-assessments.

PROTECTION OF SENSITIVE INFORMATION

Following the terrorist attacks on September 11, 2001, the volume of classified and sensitive unclassified information being developed, transmitted, and stored has substantially increased. As a result, the NRC identified the need to communicate such information rapidly among the agency's headquarters, regional offices, licensees, and other partner agencies involved in homeland security and incident response. The NRC developed a program that permits sharing of classified and sensitive unclassified information with authorized representatives, routinely limited to the SECRET National Security information level.

EMERGENCY PREPAREDNESS AND INCIDENT RESPONSE

The emergency preparedness and incident response programs are vital NRC activities. In June 2004, the NRC reorganized to integrate these two programs more effectively. The NRC continues to work with the Department of Homeland Security and other Federal agencies in revising Federal response plans and developing and administering a National Incident Management System and a unified National Response Plan in accordance with Homeland Security Presidential Directive 5, "Management of Domestic Incidents."

The NRC significantly upgraded its Incident Response Operations Center in FY 2004, with additional staffing, improved emergency response procedures, and significant equipment upgrades (such as secure telephone and fax units, upgraded satellite phones and an improved teleconferencing system).

PROGRAM PERFORMANCE

The NRC established an alternative incident response center at one of the agency's regional offices. This alternative incident response center has the same capabilities as the headquarters operations center in the event of a loss of the headquarters facility.

The NRC continues to enhance the level of security at nuclear power reactors by requiring upgraded security in the areas of physical protection; access authorization (including improved background checks); security force training, qualification, and work hours; and protection against a revised design-basis threat.

The NRC completed an expanded pilot force-on-force exercise program at 15 volunteer commercial nuclear power reactors that reduced artificialities and increased the realism of the exercises. In implementing the resulting transitional force-on-force program, the NRC increased the frequency of force-on-force drills at power reactor facilities from once every 8 years to once every 3 years.

The NRC participated in several full-participation exercises involving scenarios with radiological events at nuclear power plants. The NRC participated in the Top Officials (TOPOFF) series of exercises (a follow-on to TOPOFF-2 in May 2003, the largest and most complex Federal interagency exercise ever conducted).

The NRC participated in the first national Continuity of Operations exercise in May 2004, as well as several integrated Department of Defense exercises during the fiscal year. Notably, several of these exercises included terrorist scenarios. For example, the exercise at the Indian Point nuclear power station included a terrorist scenario that involved an aircraft attack on the facility. The Indian Point exercise demonstrated proficiency in the incident response capability and preparedness areas.

Security enhancements for export/import controls of high-risk sources are underway, and the NRC is working with the Department of Energy to upgrade the database that the Nation uses to track transfers and inventories of special nuclear material and source material, including material from abroad. The NRC is working with licensees and States to confirm the accuracy of inventories in this Nuclear Material Management and Safeguards System (NMMSS).

For the first time in two years, NRC held a public meeting to address the agency's integrated approach toward security and emergency response; and the challenges of communicating with the public on security matters without releasing sensitive information. Participants included senior NRC management and staff and a broad spectrum of stakeholders, including: members of the public, representatives from several non-governmental organizations, the media, and a



HOMELAND SECURITY

U.S. Senate office. A teleconferencing capability was used to include members of the public who were unable to come to NRC headquarters.

COORDINATION WITH OTHER FEDERAL ORGANIZATIONS

The NRC has hosted regional meetings for State Homeland Security Advisors and representatives from Federal, State, and local governments and organizations. The purpose of these meetings was to strengthen the NRC's linkages with State and local officials, and to increase their awareness of the initiatives undertaken by the NRC and the Department of Homeland Security, as they relate to the National Response Plan and other significant homeland security, incident response, and emergency preparedness activities.

In February 2004, the NRC participated in the "Unified Defense 04" exercise, a major exercise led by the U.S. Northern Command and involving the Department of Defense and other Federal, State and local agencies. This exercise focused on a scenario involving a hurricane of national significance, a general emergency at an NRC-regulated nuclear power plant resulting in a radiological release to the environment and the establishment of protective actions, and detonation of a nuclear device by terrorists.

The most significant incident during FY 2004 involving the NRC and its licensees, as well as other Federal, State, and local agencies was the follow up to the historic electrical power blackout on August 14, 2003. As the blackout raced across a multi-State area, power grid instabilities caused the nearly simultaneous automatic shutdown of nine nuclear power plants. The NRC and its licensees promptly responded to ensure public safety as part of a coordinated national response. FY 2004 analysis of the blackout, the Nation's first large-scale incident with simultaneous challenges to safety systems at multiple nuclear power plants, provided the NRC valuable insight for use in enhancing the agency's response capabilities.

In February 2004, the NRC and Department of Energy conducted a technical exchange concerning security and safeguards for the proposed geologic high-level waste repository at Yucca Mountain, Nevada. Through that technical exchange, staff representatives from both agencies discussed the Yucca Mountain Review Plan, as well as a variety of physical protection and material control and accountability issues.

INTERNATIONAL EFFORT

In the past 3 years, the U.S. Government, in tandem with the International Atomic Energy Agency, began addressing security concerns in developing the Code of Conduct for the Safety and Security of Radioactive Sources, a non-legally binding document that was published in

PROGRAM PERFORMANCE

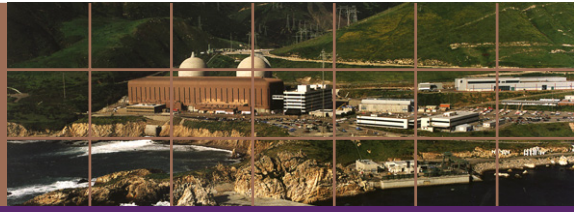
final form in January 2004, and adopted by Member States in FY 2004. Through this joint effort, the NRC made key contributions to revising the Code of Conduct and, as a result, the Member States subsequently adopted the U.S. Government's positions as proposed or with modifications that were acceptable to the U.S. Government. The NRC is currently working with other Federal agencies to implement the Code of Conduct by developing a proposed rule to require general or individual specific export and import licenses for high-risk sources. The proposed rule was issued for public comment in September 2004. This proposed rule will address the NRC's domestic program to increase security in the use of such sources, while assisting the U. S. Government in complying with the Code of Conduct. The NRC participated in a series of meetings that the International Atomic Energy Agency sponsored during FY 2004 to promote implementation of the Code of Conduct. NRC staff representatives participated in a conference in Morocco, to discuss activities aimed at implementing the international standards for radiation safety and security of radioactive sources.

NRC staff representatives met with the Russian Federation's Federal Service for Nuclear Oversight (formerly Gosatomnadzor) to discuss strengthening the security and regulatory control of high-risk radioactive sources in Russia. The NRC continued to support the Russian Federation's Federal Service for Nuclear Oversight in the area of plutonium disposition in the Russian Federation. This support of the Russian independent nuclear safety regulator has been provided through an interagency agreement with the Department of Energy. Under that agreement, the NRC has exchanged information on vulnerabilities, mitigation strategies, and security improvements with a select group of countries to understand their security challenges and action plans.

LEGISLATIVE INITIATIVES

Working together with the Homeland Security Council, its oversight committees in Congress, the Administration, and other Federal agencies, the NRC continues to support legislative proposals to enhance the security of nuclear facilities and materials.

The NRC supports the enactment of provisions that: (1) would enable licensee guards to possess more powerful weaponry, (2) enlarge the classes of NRC-regulated entities whose employees would be subject to fingerprinting and criminal history background checks, (3) expand the NRC's regulatory jurisdiction to additional classes of radioactive material as a means of enhancing protection of the public from use of the materials in radiological dispersal devices, (4) add new Federal criminal sanctions to cover acts that could endanger materials and activities regulated by the NRC, and (5) authorize the NRC to carry out training and fellowship programs to address shortages of individuals with critical nuclear safety regulatory skills.



NUCLEAR REACTOR SAFETY

NUCLEAR REACTOR SAFETY

Strategic Goal: Prevent radiation-related deaths and illnesses, promote the common defense and security, and protect the environment in the use of civilian nuclear reactors.

OVERVIEW

The Nuclear Reactor Safety program is conducted to ensure that civilian nuclear power reactors, as well as test and research reactors, are operating in a manner that adequately protects the health and safety of the public and the environment while safeguarding special nuclear materials that are used in reactors. The NRC regulates 104 nuclear power reactors and 35 test and research reactors that are currently licensed to operate. Of these licensed reactors, nuclear power plants generate approximately 20 percent of the Nation's electricity, while test and research reactors are used to conduct research and development. Almost every field of science (including physics, chemistry, and biology) uses these reactors.

The Commission's health and safety regulations provide reasonable assurance of adequate protection of public health and safety. These regulations are based on defense-in-depth principles and conservative practices that provide an adequate margin of safety.

The collective efforts of the NRC and the nuclear industry are needed in order to maintain safety. The NRC establishes rules, safety standards, and requirements for licensees; conducts thorough in-depth technical reviews of both reactor designs and the safety envelope of licensed operations; oversees safe plant operations; and responds to licensees and other stakeholders. The NRC's licensees have the responsibility to design, construct, and operate nuclear reactors safely.

ENSURING THE SAFE OPERATION OF NUCLEAR REACTORS

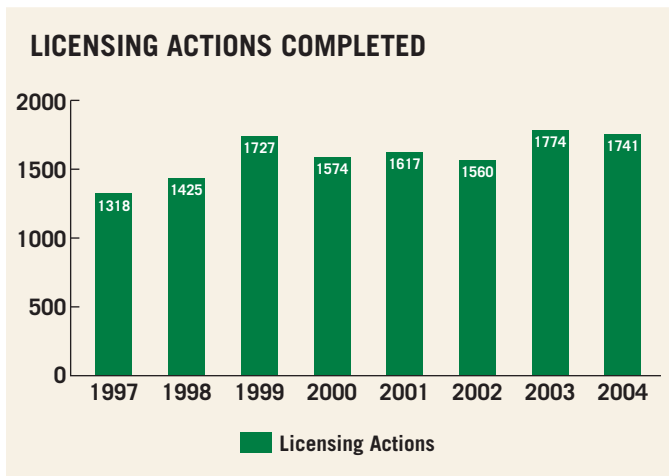
The NRC ensures the safety of nuclear reactors by establishing the related safety standards and requirements and conducting in-depth technical reviews in the course of licensing nuclear power plants and their operators. The NRC also oversees plant operating performance, maintains a security and emergency response program, establishes clear health and safety regulations, conducts research to resolve safety issues, and provides technical support for developing regulations. The NRC's Nuclear Reactor Safety programs work together to achieve the NRC's goals. Nuclear plant licensees are required to follow the NRC's regulations specifying how plants are to be designed, constructed, and operated.

PROGRAM PERFORMANCE

The NRC provides independent oversight of the plants through the Reactor Oversight Process to verify that NRC licensees are operating their plants safely and in accordance with the NRC's rules and regulations. If violations are found, the NRC may take enforcement actions. The security and emergency response programs ensure that licensees take adequate measures to respond to malevolent actions against reactors and that public safety measures are in place in the event that an incident occurs. The research program analyzes data from operations and independently undertakes studies that provide the basis for maintaining the safety of nuclear power plants. The following sections describe these safety programs in greater detail.

REACTOR LICENSING

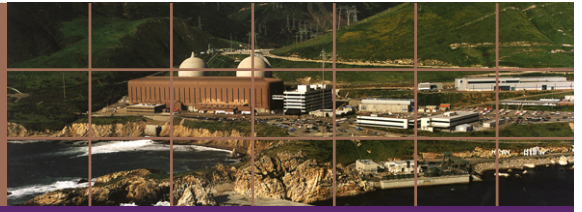
The reactor licensing program establishes requirements for licensees that sets expectations for the commercial use of radioactive material within the legal framework of the NRC's safety or environmental regulations. This includes assurances that facilities are adequately designed, properly constructed, and correctly maintained, and that trained and qualified operating and technical support personnel can prevent or cope with accidents and other threats to public health and safety. The NRC's licensing activities include reviewing license applications and changes to existing licenses, examining and licensing reactor operators, reviewing reactor events for safety significance, and improving safety regulations and guidance.



The NRC met or exceeded three of its established five output measures for reactor licensing during FY 2004. The goals successfully achieved were completing a minimum of 1,500 reactor licensing actions (1,741 licensing actions were completed), completing a minimum of 350 other licensing actions (671 other licensing actions were completed), and completing 100 percent of licensing actions within two years. The two missed goals were maintaining a working inventory of 1,000 or less licensing actions, which has grown to an inventory of 1,135 actions; and completing 96 percent of the licensing actions within one year by the end of the fiscal year (91 percent of licensing actions were completed in less than 1 year at the end of FY 2004). The missed targets were a result of the

redirection of resources to higher priority security work including review of security plans, safeguards contingency plans, and training and qualification plans.

Forty-five initial operator licensing examinations were given in FY 2004. Although 50 exams were estimated and budgeted, several were rescheduled or delayed into 2005 based upon facility



NUCLEAR REACTOR SAFETY

requests. Four Generic Fundamentals Examinations (GFEs) were administered in FY 2004, exceeding the target of three exams.

POWER UPRATES

Since the 1970s, licensees have been applying for and implementing power uprates as a means of increasing the power output of their plants. The NRC's comprehensive reviews of an application are focused on the potential impacts that the proposed power uprate might have on the existing licensing-basis analyses that demonstrate overall plant safety. As a result, the review of a power uprate application provides assurance that the impacts of increasing a plant's power output are fully addressed and that plant operation at the increased power level is safe. In FY 2004, power uprates increased the Nation's in electrical generating capacity of approximately 45 MWe.

The NRC has set timeliness standards for these reviews in order to ensure a stable and predictable regulatory environment for the safety and environmental review of these licensing actions. In FY 2004, the NRC met its timeliness standard for each category of power uprate reviews.

LICENSE TRANSFERS

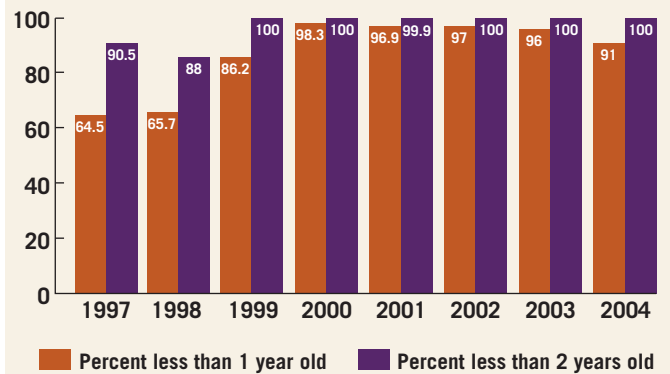
In the area of other licensing actions, the NRC has engaged in financial review activities for nuclear power plants as States have taken steps toward deregulating the power market, unbundling services, and generally consolidating the utility industry. The cases that the NRC has reviewed involved such issues as the sale of a passive owner's minority share and the creation of a separate holding company. The NRC completed three license transfers.

NEW REACTOR LICENSING

The NRC continues to focus on new reactor licensing activities to ensure that the Commission's safety requirements and expectations will be met for future reactors and a stable and predictable framework will exist for potential future license applicants. These activities are in response to the nuclear industry's continued interest in new reactors and the Department of Energy's (DOE) ongoing programs efforts to cost-share new reactor licensing projects.

The NRC issued a final safety evaluation report and final design approval for the Westinghouse AP1000 advanced reactor design in September 2004.

LICENSING ACTION AGE



PROGRAM PERFORMANCE

The NRC is actively engaged in pre-application reviews of General Electric's Economic Simplified Boiling-Water Reactor and Atomic Energy of Canada, Ltd.'s Advanced Candu Reactor (ACR-700) designs, with design certification applications expected in FY 2005.

In September and October 2003, the NRC received three early site permit applications for the Clinton, North Anna, and Grand Gulf sites. The NRC will continue reviewing these applications in FY 2005, with completion projected for FY 2006.

The NRC issued NUREG-1789, "10 CFR Part 52 Construction Inspection Program Framework Document," in April 2004. The information contained in this document details the overall philosophy and approach that the NRC will use to inspect new nuclear power reactors being licensed and constructed under Title 10, Part 52, of the Code of Federal Regulations (10 CFR Part 52).

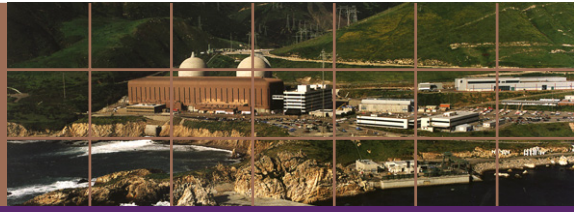
The NRC continues to develop the regulatory infrastructure needed to inspect new reactor and site license applications, and for effective and efficient licensing review of those applications. Toward that end, the NRC is currently considering stakeholder comments received in response to proposed revisions to the regulation governing early site permits, design certifications, and combined licenses. The NRC is continuing its interaction with industry representatives on generic issues associated with the receipt of a combined license application. These actions are expected to improve the effectiveness and efficiency of the licensing processes for future applicants.

LICENSE RENEWAL

The reactor license renewal program provides a stable and predictable regulatory process to implement the NRC's technical and regulatory requirements for the renewal of nuclear power plant licenses. As mandated by the Atomic Energy Act, the NRC issued original reactor operating licenses for 40 years, which may be renewed for an additional 20 years. The review process for renewal applications provides continued assurance that the level of safety provided by an applicant's current licensing basis will be maintained throughout the extended period of operation.

To date, the NRC has received applications to renew the licenses for 44 units at 24 sites and has renewed the licenses for 26 units at 15 sites. The NRC is currently reviewing applications to renew the licenses for the remaining 18 units at 9 sites.

The NRC expects that all of the currently licensed units will ultimately apply to renew their licenses. In order to establish a stable and predictable process, the NRC has specified a timeliness



NUCLEAR REACTOR SAFETY

goal of 22 months for those reviews that do not involve a hearing. The NRC met or exceeded all established schedules for completing license renewal reviews in FY 2004.

The NRC issued renewed licenses for St. Lucie Units 1 and 2, Fort Calhoun Station, Units 1 and 2 of the McGuire Nuclear Station, Units 1 and 2 of the Catawba Nuclear Station, Unit 2 of the H.B. Robinson Steam Electric Plant, the Virgil C. Summer Nuclear Station, and R.E. Ginna Nuclear Power Plant in FY 2004.

REACTOR INSPECTION AND PERFORMANCE ASSESSMENT PROGRAM

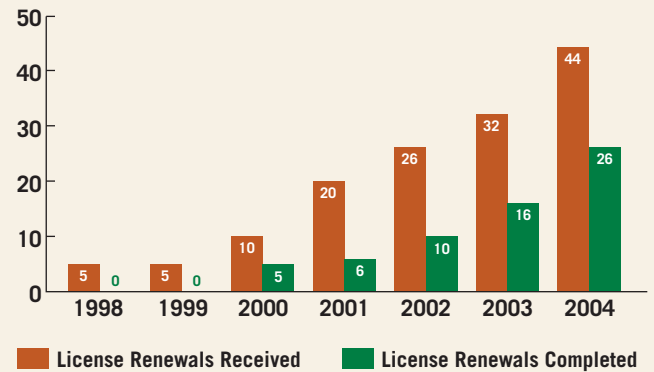
The NRC's Reactor Oversight Process verifies that nuclear plants are being operated safely and in accordance with the NRC's rules and regulations. The NRC has full authority to take whatever action is necessary to protect public health and safety and may demand immediate licensee action, up to and including plant shutdown. The Reactor Oversight Process uses both inspection findings and performance indicators to assess the performance of each plant within a regulatory framework of seven cornerstones of safety. Toward that end, the NRC performs a baseline program of inspections at each plant and may perform supplemental inspections and take additional actions, as necessary, to ensure that the plants address significant issues. The NRC communicates the results of its oversight process by placing plant-specific inspection findings and performance indicator information, as well as industry-level indicators, on the NRC's public Web site. The NRC also conducts public meetings with licensees to discuss the results of the NRC's assessments of licensee performance.

The Reactor Oversight Process is designed to maintain safety by focusing NRC and industry attention on risk-significant activities while reducing unnecessary regulatory burden on licensees. The process comprises risk-informed inspections, a significance determination process to evaluate the risk significance of inspection findings, licensee-reported performance indicator information, and assessment and enforcement activities.

As a second layer of assessment, the NRC trends the qualitative indicators of licensee safety performance, evaluates the indicators for adverse trends, and takes action to improve industry performance and/or to provide feedback into the NRC's regulatory oversight processes.

In FY 2004 the NRC continued to integrate improvements into its regulatory process as a result of the annual Reactor Oversight Process self-assessments and completed the calendar year 2003

LICENSE RENEWAL APPLICATIONS Cumulative in Units



PROGRAM PERFORMANCE

assessment in April 2004. The self-assessment results indicate that the Reactor Oversight Process was generally effective in monitoring operating nuclear power plant activities and focusing NRC resources on significant performance issues and in supporting the NRC's performance goals.

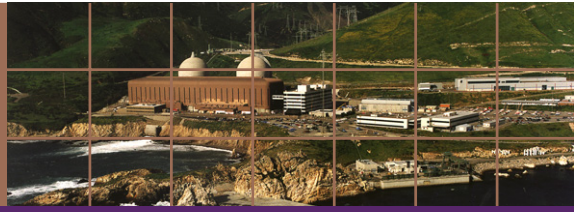
The NRC maintained its focus on stakeholder involvement and continued to improve various aspects of the Reactor Oversight Process as a result of feedback and lessons learned. The responses to the NRC's annual survey of external stakeholders, which solicited feedback on the Reactor Oversight Process, were generally favorable; however, some stakeholders raised concerns about the complexity and subjectivity of the significance determination process, the effectiveness of the performance indicator program, and other areas for improvement. These and other stakeholder insights and views have been evaluated for improvements to the Reactor Oversight Process in fulfilling the regulatory principles of being predictable, understandable, objective, and risk-informed.

Davis-Besse Lessons Learned

In March 2002, First Energy Nuclear Operating Company, the licensee for the Davis-Besse Nuclear Power Station, discovered a cavity in the plant's reactor pressure vessel head. The NRC inspected and assessed this safety issue; directed licensees to report the condition of their reactor pressure vessel heads, past incidents of boric acid leakage, and their inspection and examination programs; assessed the operating experience function; and chartered the Davis-Besse Lessons Learned Task Force to look for ways to improve NRC performance. Forty-nine recommendations were adopted and addressed through action plans that focus on incorporating the reactor pressure vessel inspection requirements into the *Code of Federal Regulations*, coordinating research activities for evaluating potential improvements in detection and monitoring of leakage in reactor coolant system components, assessing the NRC's operating experience function, and changing the NRC's inspection program. In FY 2004, NRC implemented changes that focused on identifying repetitive equipment problems and better management of resident inspector staffing levels. In addition, a task force analyzed how the NRC evaluates and disseminates operating experience to staff, licensees and others.

SAFETY RESEARCH

The NRC's reactor safety research program evaluates and resolves safety issues for nuclear power plants, proposes regulatory improvements, coordinates agency activities related to consensus and voluntary standards for agency use, assesses the effectiveness of selected NRC programs, and evaluates operational events to identify precursors to accidents. The agency conducts its research programs to evaluate areas of potentially high risk or safety significance, reduce uncertainties in risk assessments, and to develop the technical basis to support realistic safety



NUCLEAR REACTOR SAFETY

decisions. Where possible, the NRC engages in cooperative research with other government agencies such as Department of Energy and National Aeronautics and Space Administration, the nuclear industry, universities, and international partners. The research program includes the key areas of risk analysis, fuel and thermal-hydraulic research, materials degradation, structural integrity research, new reactors, and digital safety systems research.

Risk Analysis and Rulemaking

Work is underway to advance the state of the art and apply risk assessment methods to provide a technical basis for improving reactor regulatory programs. The reactor research program supports the agency's efforts to use risk information in all appropriate aspects of regulatory decisionmaking, applies risk assessment technology to resolve safety issues, develops a risk-informed regulatory framework, and focuses regulatory activities on the most risk significant aspects of licensed activities. The research program improves risk technology and modeling techniques, reduces uncertainties, and develops improved data. In FY 2004, the NRC continued to focus on making risk-informed changes to regulations such as acceptance criteria for emergency core cooling systems (10 CFR 50.46) and protection against reactor pressure vessel thermal shock (10 CFR 50.61). Furthermore, the NRC is developing additional regulatory guidance on risk standards to support risk informed decisionmaking.

Fuel and Thermal-Hydraulic Research

The NRC is conducting studies of fuel behavior with advanced cladding and at high burnup. This experimental work confirms that safety is being maintained as the industry seeks the economies of advanced fuel designs and high utilization (burnup). This work will provide the technical basis for use of advanced fuel cladding alloys and permit higher fuel burnup. This first of a kind experimental program, along with analytic methods that have been developed, will establish new safety limits for energy deposition and clad oxidation during postulated accidents. The NRC, the international community, and industry are co-funding much of this work to achieve significant efficiencies.

The NRC has developed independent audit capability for assessing the performance of mixed-oxide fuels under normal, transient, and accident conditions and is now performing assessments of fuel performance. This work provides the technical basis for use and disposal of weapons grade plutonium in a power reactor.

The NRC has an extensive thermal-hydraulic program comprising experimental testing, model development, and validation. The application of these models and experimental results provide

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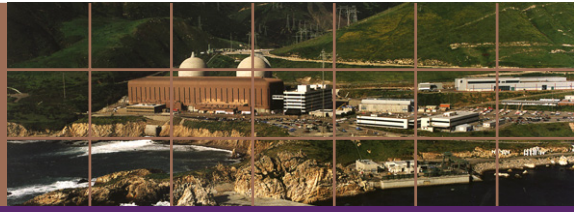
the technical basis for risk-informing the regulations, addressing emergent safety issues, and providing the capability for independent audit calculations for proposed new designs. This effort is being used in the staff review of the AP1000 and Economic Simplified Boiling-Water Reactor new reactor designs.

Materials Degradation and Structural Integrity Research

The ability of structures, systems, and components to withstand normal operational loads, design-basis loads, and accidental loads (including natural hazards, such as seismic events, tornados, and floods) is important to safe operation of nuclear power plants. Recent events related to the cracking of nickel-base alloys and associated weldments (e.g., cracking of the control rod drive mechanism nozzles at pressurized water reactors) have highlighted the importance of aging/degradation research and has focused worldwide interest on being proactive in managing the degradations; that is, finding degradation and dealing with it prior to any significant loss of safety margin. Therefore, the major goal of the research in this area is to provide data and analysis methods to support the development of regulatory strategies to assure that the safety is maintained. Many of the structural integrity research projects relate to the evaluation of aging and environmental effects on plant components and structures. These projects include evaluations of methods for non-destructive examination to identify potential degradation, methods for conditional assessment, understanding of degradation mechanisms, methods to evaluate performance of degraded components, and methods to repair and mitigate the potential effects of these conditions. Methods are being developed to evaluate the effects of degradation of passive components on plant risk to support risk-informed regulatory decisions. In part, this research involves cooperative efforts with the industry and other international organizations to share operating experience and experimental data. In addition to addressing aging effects, the structural integrity research has helped to establish the technical bases to support reactor license renewal. Structural integrity research also involves evaluation and validation of analytical models and methods, independent and confirmatory integrity evaluations, assessment of impact of new information, and development of technical bases for potential revision of rules and regulatory guides. This research continues to lead to improved efficiencies at the NRC and to the reduction of unnecessary burden by providing increasingly realistic methods and assumptions for regulatory decisions.

Digital Safety Systems Research

The instrumentation and control systems originally installed in nuclear power plants use analog technology. The replacement components for these systems are increasingly costly and difficult to obtain. Therefore, licensees are beginning to upgrade their instrumentation and control systems with digital control systems. Several current projects provide the technical basis for



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assessing the ability of existing digital technologies to perform their intended functions under the adverse environmental conditions that may be expected in a nuclear power plant. Such conditions include electromagnetic and radio frequency interference, as well as abnormal conditions such as smoke and steam environments. The NRC is also conducting research to advance the state-of-the-art assessment of the reliability of complex digital safety systems, including software-based and commercial off-the-shelf systems. This research leverages work that has been performed for other agencies and countries to maximize the efficient use of NRC resources.

In addition, new advanced reactor plants are expected to use advanced digital instrumentation and control systems. Several current projects are examining emerging technologies to identify issues that must be addressed in the licensing process and provide the technical basis for the agency's safety review.

INDUSTRY TRENDS PROGRAM¹

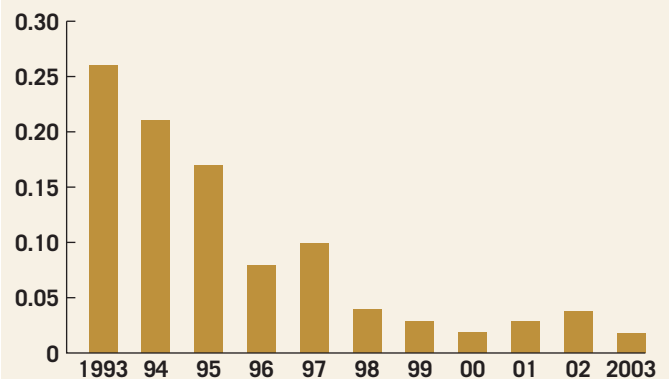
The NRC measures the effectiveness of its Nuclear Reactor Safety programs based on the continued safe operation of the Nation's nuclear power plants. In addition to monitoring the performance of individual plants, the NRC compiles data on overall safety performance using several industry-level performance indicators, some of which are addressed in the following pages. NRC analyzes data that is outside of the prediction limits for safety that are set using statistical analysis. These indicators show significant improvement in the long-term trends for safety performance of nuclear power plants since 1993.

The Industry's Safety Performance Record

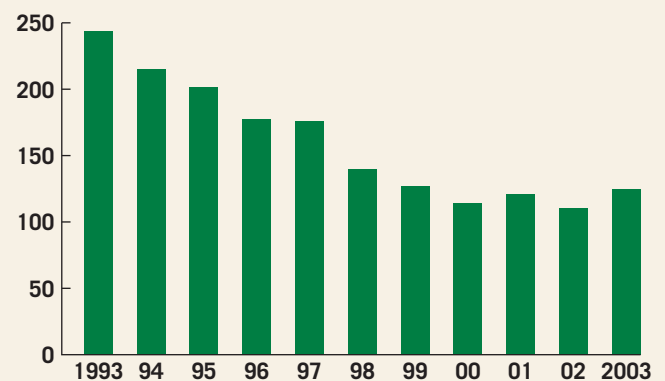
Several industry indicators of safety performance show significant statistical improvement. One such indicator is significant events, which meet specific criteria, such as degradation of important safety equipment. In reviewing operating events and assessing their safety significance, the NRC has determined that the statistical trend for number of significant events has declined since 1993.

The total radiation dose received by workers at nuclear plants is an indicator of the effectiveness of the controls on occupational radiation exposure. Worker radiation dose shows a significant reduction in the statistical trend since 1993.

SIGNIFICANT EVENTS Per Reactor

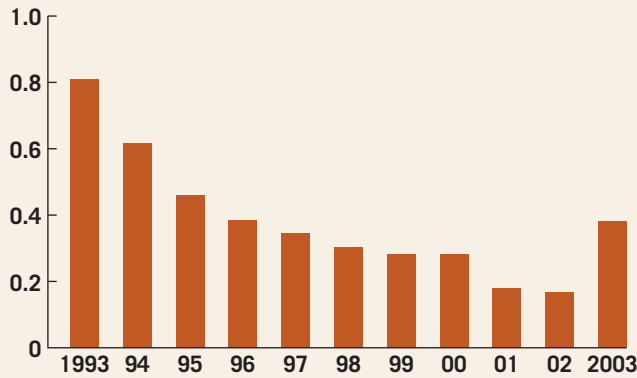


COLLECTIVE RADIATION EXPOSURE Per Person-cSv



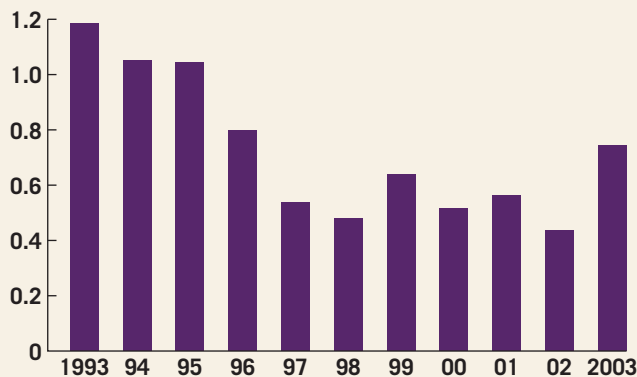
PROGRAM PERFORMANCE

SAFETY SYSTEM ACTUATIONS Per Reactor



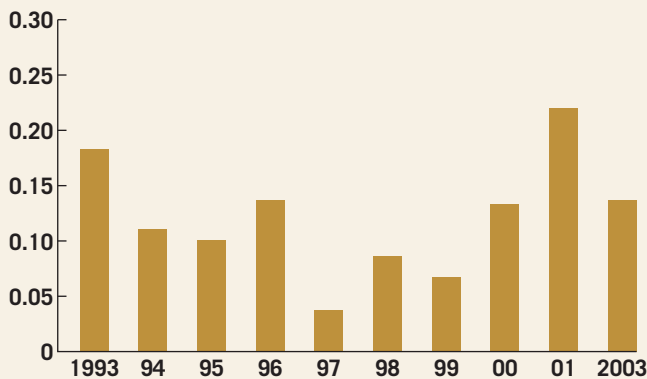
Safety systems mitigate off-normal events, such as the August 2003 widespread power blackout, by providing reactor core cooling and water addition. Actuations of safety systems that are monitored include certain emergency core cooling and emergency electrical power systems. Actuations can occur as a result of “false alarms” (such as testing errors) or in response to actual events. The statistical trend for number of safety system actuations has declined since 1993.

AUTOMATIC SCRAMS Per Reactor



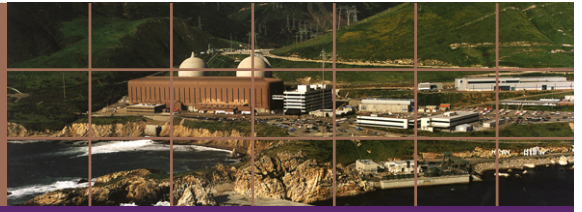
A scram is a basic reactor protection safety function that shuts down the reactor by inserting control rods into the reactor core. Scrams can result from events that range from relatively minor incidents or human error to precursors of accidents. The August 2003 massive power blackout accounts for most of the increase in scrams from FY 2002, but has not affected the statistical trend for number of scrams, which has been declining steadily since 1993.

PRECURSOR OCCURRENCE RATE Per Reactor Per Year



The NRC assesses the risk significance of events at plants. A precursor event is an event that has a probability of greater than 1 in 1 million of leading to substantial damage to the reactor fuel. There is no statistically significant adverse trend in the occurrence rate of precursor events since 1993. Due to the complexities associated with evaluating precursor events, the data always lag other indicators. Available data through FY 2002 is shown.

Safety system failures (top of opposite page) include any events or conditions that could prevent a safety system from fulfilling its safety function. The statistical trend for number of safety system failures across the industry has declined since 1993.



NUCLEAR REACTOR SAFETY

Power Generation and Average Capacity Factor are indicators that are not a part of NRC's Industry Trends Program. As noted on the charts, this data is obtained from DOE.

Improvements in safety have occurred at a time when nuclear power generation has increased significantly, from 455,000 gigawatt hours in 1987 to approximately 764,000 gigawatt hours in 2003.

The average annual capacity factor, a measure of power plant efficiency, has increased from 62 percent in 1987 to 88.4 percent in 2003.

THE NRC'S ROLE IN IMPROVING SAFETY

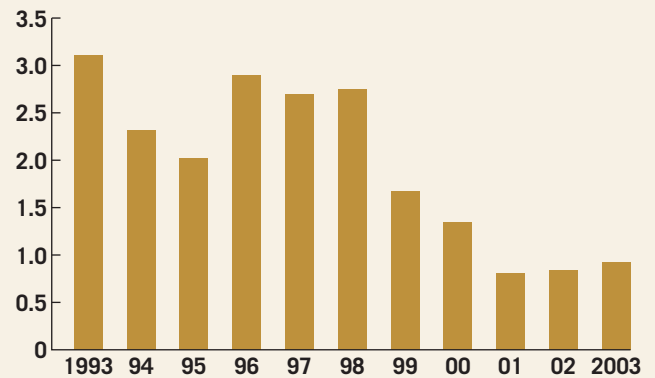
The improvement in the safety performance of nuclear power plants is the result of the combined efforts of the nuclear industry and the NRC. Both the nuclear industry and the NRC have gained experience in the operation and maintenance of nuclear power facilities.

The NRC establishes the safety standards and safety requirements, performs in-depth technical reviews of proposed reactor designs, and oversees plant operating performance. It will not allow licensees to operate their plants if safety performance falls below acceptable levels.

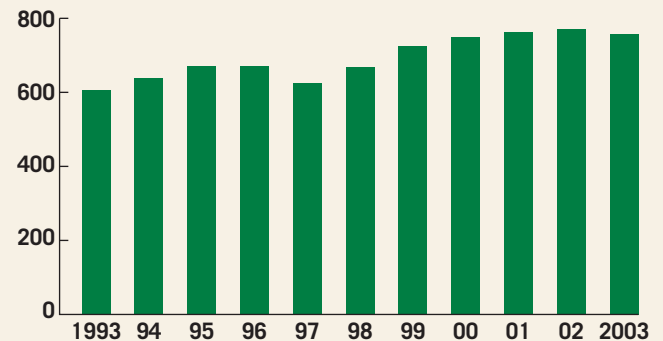
Licensees have the primary role in maintaining safety. They are responsible for designing, maintaining and operating nuclear power plants in a manner that provides adequate protection of public health and safety.

Experience in plant operations and feedback from operating experience data have yielded a steady stream of improvements in the reliability of plant systems and components, plant operating procedures, training of power plant operators, and regulatory oversight.

SAFETY SYSTEM FAILURES Per Year

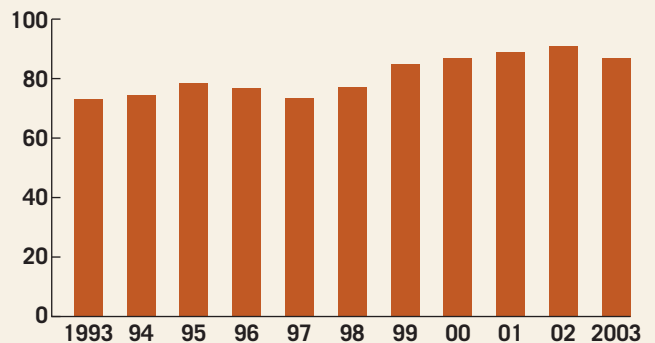


NUCLEAR POWER GENERATION Gigawatt Hours



Source: DOE/EIA Monthly Energy Review

AVERAGE CAPACITY FACTOR Percent



Source: DOE/EIA Monthly Energy Review

PROGRAM PERFORMANCE

ANNUAL GOALS AND MEASURES

Strategic Goal 1: Prevent radiation-related deaths and illnesses, promote the common defense and security, and protect the environment in the use of civilian nuclear reactors.

Strategic Goal Results

The NRC has identified five measures to determine whether the NRC has met its Nuclear Reactor Safety strategic goal. These are top-level measures that define the NRC's success in overseeing reactor licensees. The goal of the NRC's regulatory efforts is to prevent the occurrence of any of the events described in the measures below.

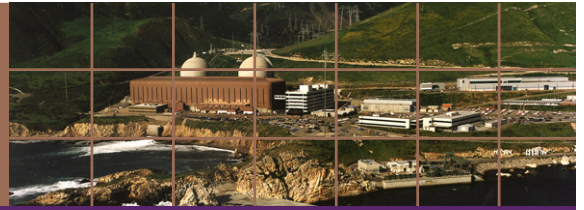
Measure	2001	2002	2003	2004
1-1. No nuclear reactor accidents. ²	0	0	0	0
1-2. No deaths resulting from acute radiation exposures from nuclear reactors. ³	0	0	0	0
1-3. No events at nuclear reactors resulting in significant radiation exposures. ⁴	0	0	0	0
1-4. No radiological sabotages at nuclear reactors. ⁵	0	0	0	0
1-5. No events that result in releases of radioactive material from nuclear reactors causing an adverse impact ⁶ on the environment.	0	0	0	0

Results: The NRC has met all of the strategic goal measure targets.

PERFORMANCE GOALS

In addition to our strategic goals, the NRC has four performance goals and measures for Nuclear Reactor Safety:

- (1) Maintain safety, protection of the environment, and the common defense and security.
- (2) Increase public confidence.
- (3) Make NRC activities and decisions more effective, efficient, and realistic.
- (4) Reduce unnecessary regulatory burden on stakeholders.



NUCLEAR REACTOR SAFETY

PERFORMANCE GOAL RESULTS

Performance Goal 1: Maintain safety, protection of the environment, and the common defense and security.

Measure	2001	2002	2003	2004
1-1. No statistically significant adverse industry trends in safety performance ⁷ .	0	0	0	0
1-2. No more than one event per year identified as a significant precursor of a nuclear accident ⁸ .	0	1	0	0
1-3. No events resulting in radiation overexposures from nuclear reactors that exceed applicable regulatory limits ⁹ .	0	0	0	0
1-4. No more than three releases per year to the environment of radioactive material from nuclear reactors that exceed the regulatory limits ¹⁰ .	0	0	0	0
1-5. No breakdowns of physical security that significantly weaken the protection against radiological sabotage, theft, or diversion of special nuclear materials in accordance with abnormal occurrence criteria ¹¹ .	0	0	0	0

Results: The NRC has met all of the performance goal measure targets.

1-1. Adverse Safety Trends: The first measure tracks the trends of several key indicators of industry safety performance. The indicators provide insights into major areas of reactor performance, including reactor safety, radiation safety, and physical protection. These trends represent industry averages, rather than individual plant performance. Statistical analysis techniques are applied to each indicator to determine its long-term trend. To date, there have been no statistically significant adverse trends in any of the indicators. The data are current as of June 1, 2004.

1-2. Significant Precursors: The second measure tracks “significant” precursor events, which are defined as those events that have a probability of 1 in 1,000 or greater of leading to substantial damage to the reactor fuel. With one potentially significant precursor event in FY 2002, the data are current as of September 30, 2004.¹²

1-3. Overexposures: The third measure tracks individual radiation overexposures within any nuclear power plant. Radiation levels are carefully monitored within the plants, and this measure focuses on instances in which an individual is exposed to radiation levels that exceed set limits. Any exposures below these limits would not be expected to harm an individual. The data are current as of September 30, 2004.

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1-4. Releases to the Environment: In addition to the NRC's duty to ensure safe operation within nuclear plants, the NRC has established a performance goal to ensure that the environment is not harmed by radioactive releases from the generation of nuclear power. These releases can be in the water that is used for cooling within the plant or through vents to the atmosphere. Radioactivity releases to the environment are tracked using set regulatory limits. Any releases below these limits would not be expected to harm either an individual or the environment. The data are current as of September 30, 2004.

1-5. Security: The fifth measure reflects the effectiveness of NRC regulations that are designed to promote the physical security of the Nation's nuclear plants. Any breakdowns of security are reported, and the NRC assembles in Headquarters an information assessment team to investigate the incident.

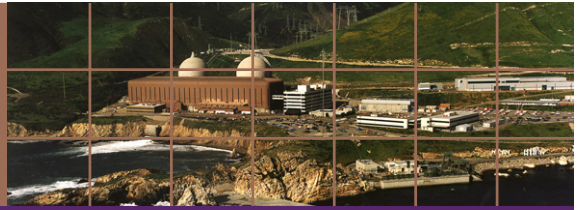
Performance Goal 2: Increase public confidence.

Measure	2001	2002	2003	2004
2-1 Complete milestones relating to collecting, analyzing, and trending information for measuring public confidence.	Met	Met	Met	Met
2-2 Complete all public outreaches.	Met	Met	Met	Met
2-3 Issue Director's Decisions for petitions filed to modify, suspend, or revoke a license under 10 CFR 2.206 ¹³ within an average of 120 days.	Met	Not met	Met	Met

Results: The NRC met all of the performance goal measure targets.

2-1. Public Confidence: The FY 2004 target for this performance measures is to "Create a Web-based system to compile and analyze trends in the responses of the feedback forms to assess the NRC's meeting performance." The NRC has analyzed the data, and the results were transmitted to the staff.

2-2. Public Outreach: Public outreach meetings give the public opportunities for meaningful participation in NRC activities and enable the NRC to give the public information concerning those activities. For the second measure, the NRC held all 37 of the scheduled public outreach meetings associated with this measure. The NRC collected and considered feedback from the public and used that feedback to define the scope and possible environmental impacts of license renewal activities. In addition, the NRC conducted outreach activities to answer the public's



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questions concerning issues related to Davis-Besse and the early site permit process for the Clinton, North Anna, and Grand Gulf sites.

2-3. Director's Decisions: During FY 2004, the NRC issued five Director's Decisions, with an average response time of 88 days. Because of the complexity associated with petitions, some require the full 120 days and some require more. In order to meet the average of 120 days or less, NRC must complete some Director's Decisions in below average time.

Performance Goal 3: Make NRC activities and decisions more effective, efficient, and realistic.

Measure	2001	2002	2003	2004
3-1 Complete specific reactor milestones in the Risk-Informed Regulation Implementation Plan.	Met	Met	Met	Met
3-2 Complete at least two key process improvements per year in selected program and support areas that increase efficiency, effectiveness, and realism.	Met	Met	Met	Met
3-3 Complete all license renewal application reviews within 30 months of receipt if a hearing is held, within 22 months without a hearing, beginning in FY 2003 (25 months without a hearing prior to FY 2003). Complete all non-standard license renewal application reviews within the schedule agreed upon with the applicant.	Met	Met	Met	Met

Results: The NRC met all of the performance goal measure targets.

3-1. Risk-Informed Regulation: The first measure focuses on progress in developing a coordinated approach to implementing risk-informed decisions throughout the NRC's regulatory processes. The NRC completed the specific nuclear reactor safety milestones identified for each year in the Risk-Informed Regulation Implementation Plan on schedule. The milestones include completing rulemaking for the performance-based fire protection rule endorsing the NFPA-805 standard promulgated by the National Fire Protection Association (10 CFR 50.48). Other milestones include approving Risk Management Technical Specifications Initiatives that allow for a risk-informed evaluation to determine whether it is better to shut down or continue to operate a reactor plant under certain conditions and to define actions to be taken when certain support equipment is not operable but is still functional. The Risk-Informed Regulation Implementation Plan is available on NRC's public Web site at <http://www.nrc.gov/reading-rm/doc-collections/commission/secys/2004/secy2004-0068/2004-0068scy.html>

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3-2. Process Improvements: The second measure concerns actions to improve the NRC's internal processes. During FY 2004, the NRC improved its processes in two key aspects of the Nuclear Reactor Safety program, thereby increasing the effectiveness and efficiency of the reactor licensing and inspection programs.

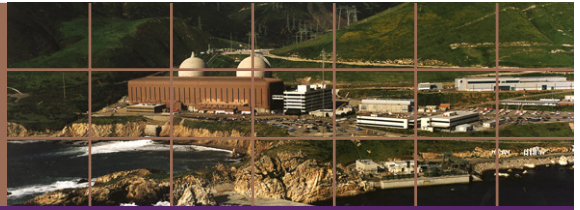
First, the NRC improved effectiveness and efficiency in the review of early site permits through the development of a review standard. The Office of Nuclear Reactor Regulation issued the Early Site Permit Review Standard (RS-002). The review standard: (1) describes the process for reviewing an early site permit application and provides guidance for completing the steps in the process, (2) provides detailed guidance for reviewing early site permit applications, (3) provides a sample safety evaluation for the NRC to use as guidance for documenting the results of early site permit application reviews, and (4) provides references to inspection guidance that supports the NRC's determinations concerning early site permits. The second process improvement targeted the efficiency of the Significance Determination Process through the development of several risk assessment tools by the Office of Nuclear Reactor Regulation. These tools distill complicated reactor-related risk information into a usable format for use by NRC inspection staff, senior reactor analysts, and risk analysts. The purpose of Significance Determination Process risk assessment tools is to increase the standardization of risk assessments and improve efficiency in the NRC's objective of attaining timely performance assessments of reactor licensee's performance deficiencies. These products required several years of significant staff effort and, in many cases, involved partnerships among the Office of Nuclear Reactor Regulation, the Office of Nuclear Regulatory Research, national laboratories, and external stakeholders.

3-3. License Renewals: The third measure is to ensure that the NRC handles license renewal reviews in an expeditious manner. As of June 30, 2004, the NRC completed license renewal reviews for 10 units, and issued all 10 renewed licenses within the target time frame of 30 months with a hearing or 22 months without a hearing.

Performance Goal 4: Reduce unnecessary regulatory burden on stakeholders.

Measure	2001	2002	2003	2004
4-1 Complete specific milestones to reduce unnecessary regulatory burden.	Met	Met	Met	Met

Result: The NRC met this performance goal measure target.



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4-1. Discussion: The target for this performance goal was to complete activities to reduce unnecessary regulatory burden. Completion of these activities enabled the NRC to meet its internal goals associated with reducing unnecessary regulatory burden sufficiently to justify the cost of the initiative. The initiative is described in SECY-02-0081, “Staff Activities Related to the NRC Goal of Reducing Unnecessary Regulatory Burden on Power Reactor Licensees.”

In FY 2004, the NRC identified and pursued several licensing actions and rulemakings to reduce unnecessary regulatory burden. The milestone for FY 2004 was to complete the initiative such that the cost savings resulting from the effort far exceed the cost of the initiative. The NRC completed one item in FY 2004 to eliminate requirements for monthly operating reports and occupational radiation exposure reports. The completion of this item provides savings to the NRC and the industry that exceed the cost of the total initiative. The NRC is continuing its work on several additional items. Completion of these activities will yield significant additional savings from the initiative.

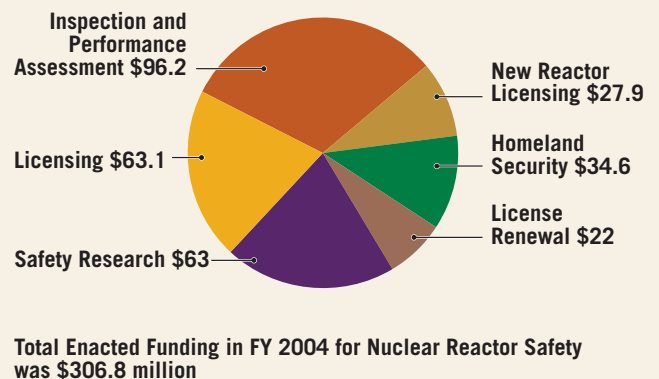
FUNDING FOR ACHIEVING GOALS

The Nuclear Reactor Safety budget, totaling \$306.8 million in FY 2004, was spent primarily on six key programs. Each program plays a specific and linked role to ensure safety at nuclear power plants. For example, the licensing program sets the standards and procedures for operating nuclear power plants, while the inspection and performance assessment program inspects the plants and collects information to ensure that licensing obligations are being met and that each plant’s performance is within the required safety range.

PROGRAM EVALUATION

In FY 2004, the NRC completed a program evaluation of its reactor operating experience functions, as documented in a report dated November 26, 2003 (ADAMS Accession #ML033350063). A task force completed the evaluation and determined that the NRC’s current reactor operating experience activities include the necessary functions to perform the short- and long-term identification of safety issues, assess their significance, and take action to address those issues. Nonetheless, the task force found that the NRC lacked a clear vision of how all of its operating experience activities should function together and be integrated with the NRC’s licensing, inspection, and research program activities. The task force made 23 recommendations to enhance current activities. The NRC is currently implementing those recommendations.

BUDGET AUTHORITY BY PROGRAM in Millions



PROGRAM PERFORMANCE

In addition, a task force performed an assessment of the NRC's process for reviewing the scoping and screening portions of license renewal applications to verify compliance with the requirements of 10 CFR Part 54, "Requirements for Renewal of Operating Licenses for Nuclear Power Plants." That assessment included a review and audit of the applicant's scoping and screening methodology, a technical review of the scoping and screening results contained in the application, and inspection of the implementation of the scoping and screening results. The intent of the assessment was to determine whether the NRC can better define the interface between organizations to minimize overlapping activities, if any, and to improve the effectiveness and efficiency of the review process. The task force's assessment showed that the various NRC organizations were conducting their related activities with approved program procedures and in accordance with regulatory requirements. Nonetheless, the team identified and documented areas for improvement in the coordination and communication of activities. The NRC is currently evaluating possible approaches for implementing the team's recommendations.

In FY 2003, the NRC's Office of the Inspector General conducted an independent program evaluation of the NRC's oversight of research and test reactors (Audit Report OIG-03-A-16). Through that evaluation, the Office of the Inspector General found that the program met expectations for reviewing and approving licensee requests for changes to licenses, met licensee demands for licensing reactor operators, and generally satisfied inspection requirements. Nonetheless, the Office of the Inspector General documented six recommendations to further enhance the effectiveness of the research and test reactor program. In FY 2004, the NRC completed actions on all six recommendations.

NUCLEAR MATERIALS SAFETY

Strategic Goal: Prevent radiation-related deaths and illnesses, promote the common defense and security, and protect the environment in the use of source, byproduct, and special nuclear materials.

OVERVIEW

The Nuclear Materials Safety program encompasses NRC-regulated aspects of nuclear fuel cycle facilities and nuclear materials activities, including all regulatory activities carried out by the NRC and the Agreement States to ensure that nuclear materials and facilities are used in a manner that protects the health and safety of the public and the environment, while also protecting against radiological sabotage and theft or diversion of special nuclear materials.

The NRC and 33 Agreement States regulate more than 20,000 specific and 150,000 general licensees. This diverse regulated community includes uranium extraction, conversion, and enrichment, as



NUCLEAR MATERIALS SAFETY

well as nuclear fuel fabrication facilities. It also includes large and small users of nuclear material for industrial, medical, or academic purposes. Specifically, these users include radiographers, hospitals, private physicians, nuclear gauge users, large and small universities, and others.

ENSURING THE SAFE USE OF NUCLEAR MATERIALS

Nuclear Materials Safety encompasses several distinct programs including fuel facilities licensing and inspection, materials users licensing and inspection, materials safety research, and State and tribal programs. The following sections discuss the NRC's achievements in each of these programs.

FUEL FACILITIES LICENSING AND INSPECTION

The NRC licenses and inspects all commercial nuclear fuel facilities that are involved in processing and fabricating uranium ore into reactor fuel. These licensing and inspection activities are a key aspect of the agency's nuclear fuel cycle safety and safeguards program. As such, these activities include conducting detailed health, safety, safeguards, and environmental licensing reviews and inspections of licensees' programs, procedures, operations, and facilities to ensure safe and secure operations.

Each of the Nation's 41 fuel cycle facilities holds a license or certificate that specifies the materials the licensee may possess and sets restrictions on how those materials may be used. In addition to authorizing the possession and use of source, special nuclear, and byproduct material, each license or certificate establishes related licensee responsibilities (such as worker protection, environmental controls, and financial assurance).

The NRC issues these fuel cycle facility licenses or certificates in accordance with requirements promulgated in the Code of Federal Regulations. Applications for licenses or certificates demonstrate how the licensees will operate their facilities to ensure adequate safety and safeguards.

The NRC completed 129 fuel cycle licensing actions and conducted 86 inspections of fuel cycle licensees during FY 2004.

The NRC is currently involved in several significant fuel cycle licensing reviews. Among these reviews, the NRC staff is currently evaluating the application from Duke, Cogema, Stone & Webster to construct a mixed-oxide fuel fabrication facility on the Department of Energy's Savannah River site near Aiken,

NUMBER OF CORE SAFETY AND SAFEGUARDS INSPECTIONS COMPLETED

All Inspections Completed as Scheduled in Fuel Cycle Master Inspection Plan



PROGRAM PERFORMANCE

South Carolina. The proposed use of mixed-oxide fuel is part of a national nonproliferation initiative to dispose of surplus weapons-grade plutonium by irradiating it in existing commercial light-water reactors. In FY 2004, the Department of Energy directed Duke, Cogema, Stone & Webster to change the location of the facility's controlled area boundary. Consequently, on June 15, 2004, the NRC received a revised construction authorization request from Duke, Cogema, Stone & Webster addressing the location change among others. NRC expects to complete its review by February 2005.

In February 2004, the NRC completed its review of the license application received from the United States Enrichment Corporation, Inc., for a commercial gas centrifuge lead cascade test and demonstration facility. The NRC issued its related environmental assessment and safety evaluation report in January 2004 and, on February 24, 2004, the Commission issued the United States Enrichment Corporation, Inc., a license for the lead cascade facility. The United States Enrichment Corporation, Inc., submitted a license application for a commercial-scale facility to NRC on August 23, 2004. The NRC received a license application and environmental report from the Louisiana Energy Services for the National Enrichment Facility, a commercial gas centrifuge uranium enrichment facility, which would be located in Eunice, New Mexico. The NRC is currently reviewing that license application. A draft environmental impact statement was issued September 30, 2004 (NUREG-1790).

The NRC is conducting integrated safety analysis summary reviews for individual license amendment requests. These independent reviews are part of the agency's implementation of the revised regulation established in Title 10, Part 70, of the Code of Federal Regulation (10 CFR Part 70), which increases the use of risk information for fuel cycle facilities. During this fiscal year, the NRC initiated reviews of an integrated safety analysis submitted by BWX Technologies, Inc.; and partial integrated safety analyses submitted by Westinghouse Electric Co., LLC and Global Nuclear Fuel-Americas, LLC.

MATERIALS USERS LICENSING AND INSPECTION

The NRC currently regulates and inspects approximately 4,500 specific licensees for the use of nuclear byproduct and other radioactive materials. These uses include medical diagnosis and therapy, medical and biological research, academic training and research, industrial gauging and nondestructive testing, production of radiopharmaceuticals, and fabrication of commercial products (such as smoke detectors) and other radioactive sealed sources and devices.

Detailed health and safety reviews and inspections of licensee procedures and facilities provide reasonable assurance of safe operations and the development of safe products. The NRC routinely



NUCLEAR MATERIALS SAFETY

inspects materials licensees to ensure that they are using nuclear materials in a safe manner, maintaining accountability of those materials, and protecting public health and safety. NRC also inspects to identify and analyzes operational experience from NRC and Agreement State licensees.

In FY 2004, NRC completed review of 3,389 materials licensing actions and 1,275 materials program inspections.

The NRC worked with the Department of Energy to facilitate the recovery of nearly half of the 5,500 unwanted or orphaned greater-than-class-C radioactive sources that were initially identified for accelerated recovery under the Department of Energy's Offsite Source Recovery Program. This program is an ongoing effort and since the creation of the initial list, additional sources meeting the criteria have been registered for recovery. Recovery of the remaining half of the original 5,500 sources, as well as newly registered sources will continue.

The NRC is currently developing an initial national inventory of high-risk radioactive sources. Within the first few months, over 99 percent of licensees had responded to the NRC's voluntary information collection request. This inventory is responsive to recommendations of the Department of Energy/NRC Interagency Working Group on Radiological Dispersal Devices, which outlined actions to increase controls on, and prevent access to, radioactive sources of greatest concern.

The NRC, the Department of Energy, the Organization of Agreement States, and the Conference of Radiation Control Program Directors, Inc. are working together to develop a national source tracking system, which will ensure timely "cradle-to-grave" tracking of high-risk sources.

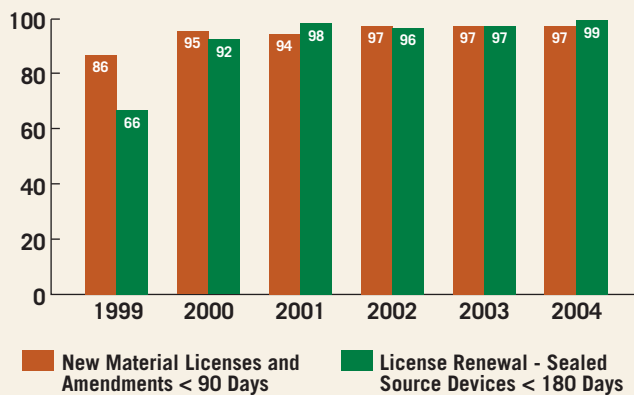
The NRC finalized Inspection Manual Chapter 2800, "Materials Inspection Program," which was previously issued in draft form. The revised inspection guidance is more complete than the earlier version and is suitable for use by both qualified inspectors and inspectors-in-training. The revised guidance increases the use of risk insights, and incorporates information gathered during use of the draft guidance. The new procedures included in the revised manual chapter have resulted in more effective use of resources.

The NRC issued for public comment, a proposed rule to amend requirements for training and experience in 10 CFR Part 35, "Medical Use of Byproduct Material." The proposed rule would amend requirements for recognition of speciality boards whose certifications may be used to demonstrate the adequacy of the training and experience of individuals to serve as radiation safety officers, authorized medical physicists, authorized nuclear pharmacists, or authorized users. In so doing, the proposed rule would reduce regulatory burden by making requirements more flexible.

PROGRAM PERFORMANCE

The NRC monitors materials safety issues through the agency's event evaluation and incident response activities. In particular, the NRC met regularly to evaluate the safety significance of the events reported by agency licensees and Agreement States.

TIMELINESS REVIEW OF NUCLEAR MATERIAL LICENSING APPLICATIONS Percent Completed on Time



The NRC's timeliness in reviewing nuclear material license renewals and sealed source and device designs has improved from 1999 through 2004.

STATE AND TRIBAL PROGRAMS

The NRC establishes and maintains effective communications and working relationships with States, local governments, Indian tribes, and interstate organizations. The NRC shares its regulatory responsibilities with 33 Agreement States. To ensure adequate protection public health and safety, as well as the compatibility of Agreement State programs with NRC programs, the NRC conducted nine Integrated Materials Performance Evaluation Program reviews of Agreement State programs. The Integrated

Materials Performance Evaluation Program uses a common evaluation process that applies to both Agreement State and NRC regional materials programs to attain a uniform materials safety policy throughout the Nation. NRC conducted nine reviews of Agreement State programs and one review of an NRC regional office.

In accordance with the Atomic Energy Act, the NRC entered into an amendment to the Agreement with the State of Utah transferring to the State regulatory authority for byproduct material (uranium mill tailings and other uranium milling wastes) which became effective August 16, 2004.

Also in accordance with the Atomic Energy Act, the NRC entered into nine agreements for States to conduct security inspections for NRC.

MATERIALS RESEARCH

The research program includes developing a technical basis to risk-inform the regulatory requirements for materials licenses by developing risk assessment tools and safety goals/guidelines for materials applications.



NUCLEAR MATERIALS SAFETY

The NRC developed a database with national and international data sets needed to perform radiologic and dosimetric calculations. This tool will enable NRC staff and licensees to quickly assess radiation exposures by having the needed information in a single database.

In response to recommendations from the Government Accountability Office, the NRC cooperated with other Federal agencies to assess the significance of radioactive material released to municipal sewage systems and published a report on the results of a survey to evaluate the extent of radioactivity occurring in sewage sludge.

ANNUAL GOALS AND MEASURES

Strategic Goal-1: Prevent radiation-related deaths and illnesses, promote the common defense and security, and protect the environment in the use of source, byproduct, and special nuclear materials.

Strategic Goal Results

The NRC has established five measures to determine whether the agency has met its Nuclear Materials Safety strategic goal. These top-level measures define the NRC's success in overseeing nuclear materials licensees. The goal of the NRC's regulatory efforts is to prevent the occurrence of any of the events described in the measures below.

Measure	2001	2002	2003	2004
1-1 No deaths resulting from acute radiation exposures from civilian uses of source, byproduct, or special nuclear materials, or deaths from other hazardous materials used or produced from licensed material. ¹⁴	0	0	0	0
1-2 No more than six events per year resulting in significant radiation or hazardous materials exposures ¹⁵ from the loss or use of source, byproduct, and special nuclear materials.	0	0	0	0
1-3 No events resulting in releases of radioactive material resulting from civilian uses of source, byproduct, or special nuclear materials that cause an adverse impact on the environment. ¹⁶	0	0	0	0
1-4 No losses, thefts, or diversion of formula quantities of strategic special nuclear material, radiological sabotages, or unauthorized enrichment of special nuclear material regulated by the NRC. ¹⁷	0	0	0	0
1-5 No unauthorized disclosure or compromise of classified information causing damage to national security. ¹⁸	0	0	0	0

Results: The NRC has met all of the strategic goal measure targets.

PROGRAM PERFORMANCE

PERFORMANCE GOALS

In addition to our strategic goals, the NRC had four performance goals and associated performance measures for the Nuclear Materials Safety program:

- (1) Maintain safety, protection of the environment, and the common defense and security.
- (2) Increase public confidence.
- (3) Make NRC activities and decisions more effective, efficient, and realistic.
- (4) Reduce unnecessary regulatory burden on stakeholders.

PERFORMANCE GOAL RESULTS

Performance Goal-1: Maintain safety, protection of the environment, and the common defense and security

Measure	2001	2002	2003	2004
1-1 No more than 300 losses ¹⁹ of control of licensed material per year. ²⁰	244	272	219	175
1-2 No occurrences of accidental criticality. ²¹	0	0	0	0
1-3 No more than 30 events per year ²² resulting in radiation overexposures ²³ from radioactive material that exceed applicable regulatory limits.	27	23	16	7
1-4 No more than 45 medical events per year. ²⁴	33	33	39	35
1-5 No more than 5 releases per year ²⁵ to the environment of radioactive material from operating facilities that exceed the regulatory limits. ²⁶	0	4	0	0
1-6 No more than 5 substantiated cases per year of attempted malevolent use ²⁷ of source, byproduct, or special nuclear material.	0	0	0	0
1-7 No breakdowns of physical protection or material control and accounting systems resulting in a vulnerability to radiological sabotage, theft, diversion, or unauthorized enrichment of special nuclear material. ²⁸	0	0	0	0
1-8 No non-radiological events that occur during NRC-regulated operations that cause impacts on the environment that cannot be mitigated within applicable regulatory limits, using reasonably available methods. ²⁹	0	0	0	0

Results: The NRC has met all of the performance goal measure targets.



NUCLEAR MATERIALS SAFETY

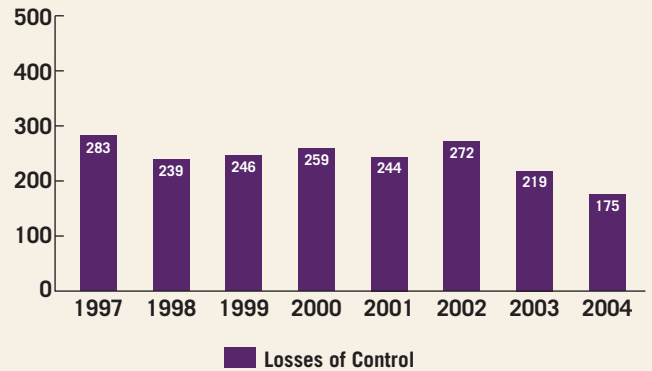
1-1 Losses of Control: The industry experienced a total of 175 losses of control of licensed material in FY 2004, which was within the target of 300 losses. This measure tracks reportable events of materials entering the public domain in an uncontrolled manner. Many of the events counted toward this measure do not, by themselves, pose a risk to public health and safety. For example, most of the losses of control of licensed material involve shielded materials, which are unlikely to result in overexposures to individuals or releases to the environment with most eventually recovered. However, the NRC includes these losses because they may indicate weaknesses in licensees' programs. Very few of the events tracked in the graph on the top right involve high enough quantities of radioactive material to pose a security concern.

1-2 Accidental Criticality: The industry did not experience any instances of accidental criticality in FY 2004 or in any year since data collection began in FY 1997.

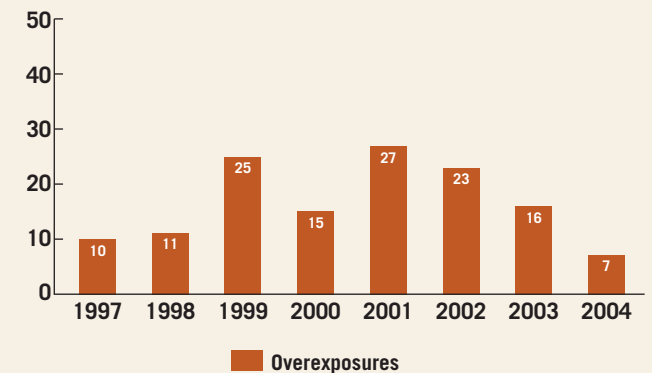
1-3 Radiation Overexposures: The industry experienced 7 events in FY 2004 that resulted in radiation overexposures from radioactive material that exceeded applicable regulatory limits. For fuel cycle facilities, this measure extends to other hazardous materials that are used with, or produced from, licensed material, consistent with 10 CFR Part 70.

Reportable chemical exposures are those that exceed license commitments. They also include chemical exposures involving uranium recovery activities under the Uranium Mill Tailings Radiation Control Act.

TARGET: NO MORE THAN 300 LOSSES OF CONTROL OF LICENSED NUCLEAR MATERIAL

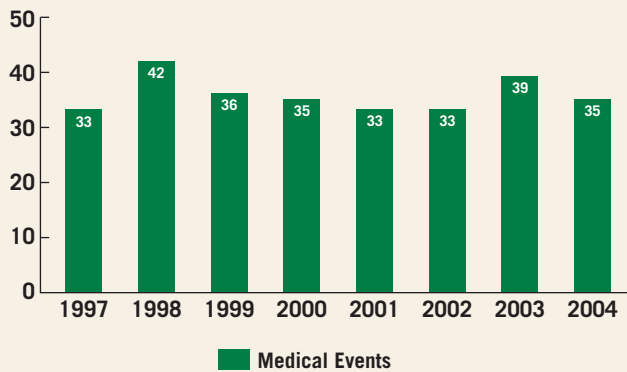


TARGET: NO MORE THAN 30 EVENTS RESULTING IN RADIATION OVEREXPOSURES



PROGRAM PERFORMANCE

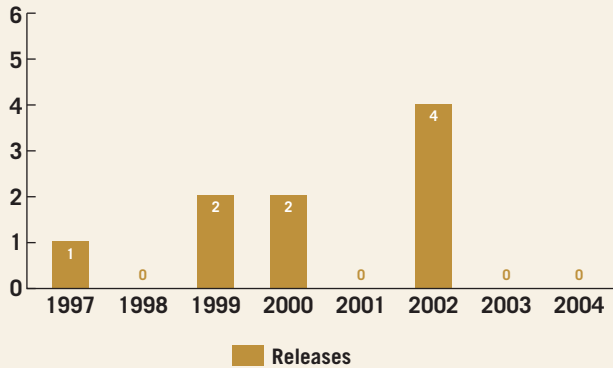
TARGET: NO MORE THAN 45 MEDICAL EVENTS



1-4 Medical Events: The industry experienced 35 medical events in FY 2004. Since data collection began under the Government Performance and Results Act, the peak year was FY 1998, when 42 events occurred. This measure pertains to medical events reported under 10 CFR Part 35, “Medical Use of Byproduct Material.” The NRC’s Medical Use Program includes those who use byproduct material in medical diagnosis and therapy.

1-5 Releases to the Environment: The fifth measure is an indicator of the effectiveness of the NRC’s nuclear materials environmental programs. The industry did not experience any releases to the environment that exceeded regulatory limits in FY 2004.

TARGET: NO MORE THAN 5 RELEASES TO THE ENVIRONMENT



1-6 Malevolent Uses: The industry did not experience any instances of attempted malevolent use of source, byproduct, or special nuclear material in the reporting period from FY 2001-FY 2004.

1-7 Breakdowns of Protection or Control: The industry did not experience any breakdowns of physical protection or material control and accounting systems resulting in a vulnerability to radiological sabotage, theft, diversion, loss of special nuclear material, or unauthorized enrichment of special nuclear material in FY 2004 or in any year since data collection began in 1990.

1-8 Nonradiological Events: The industry did not experience any nonradiological events during NRC-regulated operations that had an impact on the environment during FY 2004, or in any year since data collection began under the Government Performance and Results Act in FY 1997. This measure involves only chemical releases from the uranium mining and milling facilities that are regulated by the NRC. As such, it is limited to nonradiological environmental impacts from operations, including remediation. Examples of events that might be counted include chemical releases resulting from excursions at in situ leach facilities or releases from mill tailings piles that could contaminate groundwater.



NUCLEAR MATERIALS SAFETY

Performance Goal-2: Increase public confidence.

Measure	2001	2002	2003	2004
2-1 Complete milestones related to collecting, analyzing, and trending information for measuring public confidence.	Met	Met	Met	Met
2-2 Complete all public outreaches.	Met	Met	Met	Met
2-3 Issue Director's Decisions for petitions filed to modify, suspend, or revoke a license under 10 Code of Federal Regulation 2.206 within an average of 120 days.	NA	NA	NA	TBD

Results: The NRC has met all of the performance goal measure targets.

2-1 Public Confidence: The FY 2004 target for this performance measures is to “Create a Web-based system to compile and analyze trends in the responses of the feedback forms to assess the agency’s meeting performance.” The NRC has analyzed the data, and the results were transmitted to the staff.

2-2 Public Outreach: Public outreach meetings provide opportunities for meaningful public participation in NRC activities and information concerning those activities. In FY 2004, the NRC held over 20 public outreach meetings associated with this measure. Examples of public outreach efforts in FY 2004 include the Uranium Recovery Workshop, a workshop on Integrated Safety Analysis Summary reviews, a series of public meetings on the proposed Louisiana Energy Services gas centrifuge facility and the U.S. Enrichment Corporation’s Full-Scale American Centrifuge Facility, the annual meetings of the Organization of Agreement States and the Conference of Radiation Control Program Directors, and two meetings of the Advisory Committee on the Medical Use of Isotopes. The NRC had also planned to conduct a public meeting to discuss the final safety evaluation report concerning the Savannah River mixed-oxide fuel fabrication facility, but this meeting has been delayed until FY 2005 to allow for evaluation of the changes that Duke Cogema Stone & Webster submitted in June 2004.

2-3 Directors Decisions: In FY 2004, the NRC received two petitions that were filed under 10 CFR 2.206 with regard to the Nuclear Materials Safety program. The Director’s Decision on the Sequoyah Fuels petition is on hold pending completion of the associated licensing review. The Radiac Research Corporation petition was closed in 48 days.

PROGRAM PERFORMANCE

Performance Goal-3: Make NRC activities and decisions more effective, efficient, and realistic.

Measure	2001	2002	2003	2004
3-1 Complete specific materials milestones in the Risk-Informed Regulation Implementation Plan.	Met	Met	Met	Met
3-2 Complete at least two key process improvements per year in selected program and support areas that increase effectiveness, efficiency, and realism.	Met	Met	Met	Met

Results: The NRC has met all of the performance goal measure targets.

3-1 Risk-Informed Regulation: This measure focuses on progress in developing a coordinated approach to implementing risk-informed decisions throughout the agency's regulatory processes. The NRC completed the specific nuclear materials program milestones identified for each fiscal year in the Risk-informed Regulation Implementation Plan on schedule. Specific FY 2004 activities included updating the Risk-informed Regulation Implementation Plan, completing a feasibility/scoping study to identify and prioritize human reliability analysis needs, evaluating and incorporating recommendations to improve the effectiveness and efficiency of the Byproduct Materials Program, and updating the NRC's plans to risk-inform materials regulatory processes to reflect successes and lessons learned in implementation.

3-2 Process Improvements: This measure concerns actions to improve the NRC's internal processes. This year, the NRC conducted two process improvement reviews. For the first such review, the NRC's Office of Nuclear Material Safety and Safeguards conducted an assessment of its recruitment processes. The challenge was to ensure that the office could continue to recruit the staff it needs to accomplish its mission. The review resulted in recommendations to: (1) continue to focus on local recruitment opportunities; (2) continue to focus on events and activities that have historically been successful; (3) encourage the staff to develop relationships with colleges and universities that offer academic programs that meet our critical skills needs; (4) continue to advertise available positions in appropriate newspapers, magazines, and trade journals; (5) look for opportunities to expand routine NRC business activities to include recruitment efforts; and (6) develop informational materials that target specific skills and career opportunities so that information is readily available even if the staff is not able to physically attend a recruitment event. The NRC anticipates that implementing these recommendations will enhance the office's recruitment process and continue to ensure that the Office of Nuclear Material Safety and Safeguards meets its staffing needs.



NUCLEAR MATERIALS SAFETY

In addition, the staff completed a final report in November 2003 on an FY 2003 process improvement review of the fuel cycle facility licensing process. That report included eight recommendations in such areas as strengthening communications with applicants and improving project management. The staff has since developed a plan for implementing the recommendations.

Performance Goal-4: Reduce unnecessary regulatory burden on stakeholders.

Measure	2001	2002	2003	2004
4-1 Complete specific milestones to reduce unnecessary regulatory burden.	Not Met	Met	Met	Met

Results: The NRC has met the performance goal measure target.

4-1 Reduce Burden: The NRC met the target in FY 2004 by completing a proposed rule to amend the training and experience requirements specified in 10 CFR Part 35, “Medical Use of Byproduct Material.” The proposed rule would amend requirements for recognition of speciality boards whose certification may be used to demonstrate the adequacy of training and experience of individuals to serve as radiation safety officers, authorized medical physicists, authorized nuclear pharmacists, or authorized users. In addition, the rule would revise the existing requirements for demonstrating the adequacy of training and experience for pathways other than board certification. In so doing, the proposed rule would reduce regulatory burden by making requirements more flexible.

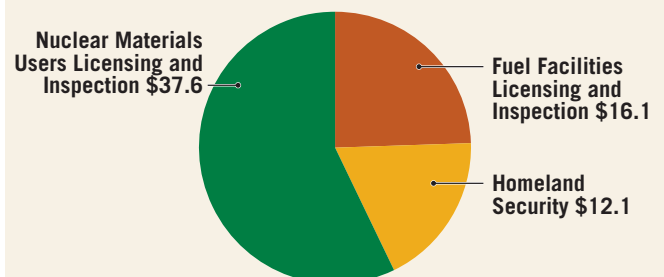
FUNDING FOR ACHIEVING GOALS

The Nuclear Materials Safety budget totaled \$65.8 million in FY 2004. This budget was allocated to three key program areas, including fuel facilities licensing and inspection, nuclear materials users licensing and inspection, and homeland security.

PROGRAM EVALUATION

The NRC’s Strategic Plan did not contain any program evaluations for the Nuclear Materials Safety program in FY 2004. Nonetheless, the NRC continued to evaluate its programs and integrated improvements to the National Materials Program and

BUDGET AUTHORITY BY PROGRAM in Millions



Total Enacted Funding in FY 2004 for Nuclear Material Safety was \$65.7 million

PROGRAM PERFORMANCE

the Integrated Materials Performance Evaluation Program Reviews. The NRC evaluated the Materials Licensing and Inspection Program using the Program Assessment Rating Tool promulgated by the Office of Management and Budget.

INTEGRATED MATERIALS PERFORMANCE EVALUATION PROGRAM

The Integrated Materials Performance Evaluation Program is an ongoing oversight program designed to evaluate the quality, adequacy, and consistency of NRC and Agreement State materials programs using a set of common performance indicators. In FY 2004, the NRC completed a review of the Region IV materials program. That review was conducted by a multi-disciplinary team, which included the participation of NRC and Agreement State personnel. The team found that the Region IV operations are fully satisfactory with respect to the technical quality of licensing and inspections, the status of the inspection program, responses to incidents and allegations, and technical staffing and training. The Management Review Board supported the team's proposed findings and determined that the program is operating in a manner that is adequate to protect public health and safety.

MATERIALS LICENSING AND INSPECTION PROGRAM

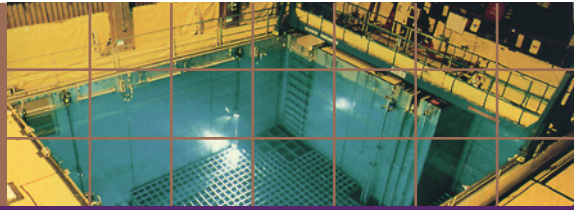
In FY 2004, the NRC evaluated its Materials Licensing and Inspection Program using the Program Assessment and Rating Tool promulgated by the Office of Management and Budget. The Office of Management and Budget rated the program "effective," which is the highest rating category, and assigned an overall score of 93.

NUCLEAR WASTE SAFETY

Strategic Goal: Prevent significant adverse impacts from radioactive waste to the current and future health and safety of the public and the environment and promote the common defense and security.

OVERVIEW

The Nuclear Waste Safety program encompasses regulatory activities associated with the disposal of radioactive wastes, decommissioning of nuclear reactors and other facilities, storage of spent nuclear fuel, transportation of radioactive materials, and waste safety research. The NRC's activities under the Nuclear Waste Policy Act focus on the proposed geologic high-level waste repository at Yucca Mountain, Nevada. The NRC conducts its low-level waste activities in accordance with the Low-Level Radioactive Waste Policy Act.



NUCLEAR WASTE SAFETY

ENSURING THE SAFE STORAGE TRANSPORTATION AND DISPOSAL OF NUCLEAR WASTE

Nuclear Waste Safety encompasses several distinct program areas, including high-level waste regulation, decommissioning and low-level waste management, spent fuel storage and transportation licensing and inspection, and waste safety research as described in the following sections.

HIGH-LEVEL WASTE REGULATION

The NRC conducts its high-level waste program in accordance with the Nuclear Waste Policy Act, as amended, and the Energy Policy Act of 1992. This legislation specifies an integrated approach and a long-range plan for high-level waste storage, transportation, and disposal. It also prescribes the respective roles of the NRC, the Department of Energy, and the Environmental Protection Agency (EPA) as they relate to the high-level waste program. Specifically, the Department of Energy is responsible for the actual disposal of the Nation's high-level waste, commencing with site characterization and repository design, and continuing through development, operation, and ultimate closure of a deep geologic repository. The Environmental Protection Agency has been charged with developing environmental standards specific to the Yucca Mountain repository, consistent with recommendations of the National Academy of Sciences. The NRC has developed and will modify if necessary technical criteria for licensing, consistent with the standards promulgated by the Environmental Protection Agency. Both the EPA and the NRC issued their standards in 2001. On July 9, 2004, both sets of standards were vacated by a Federal Court of Appeals insofar as the standards incorporated EPA's 10,000-year compliance period. EPA is now developing standards that will comply with the Court's decision. The NRC, in turn, will incorporate those new standards into its own standards."

The NRC also has extensive pre-licensing responsibilities and will be the regulatory authority to issue a license, if appropriate, after determining whether the license application that the Department of Energy ultimately submits for a geologic repository at Yucca Mountain complies with the applicable regulatory standards.

The NRC made its revised Risk-Insights Baseline Report available to the public. The NRC expects to use this revised report, together with the Yucca Mountain Review Plan and the Integrated Issue Resolution Status Report, to conduct a risk-informed review of the license application that the Department of Energy may ultimately submit for a high-level waste repository at Yucca Mountain. The NRC also continued exchanges with the Department of Energy concerning the technical issues that are most important to licensing the potential high-level

PROGRAM PERFORMANCE

waste repository and responded to the Department of Energy's questions and concerns. These exchanges resolve subissues or lead to agreements for the Department of Energy to submit additional information to address the NRC's concerns. The NRC staff expects to address all agreements with the Department of Energy in calendar year 2004.

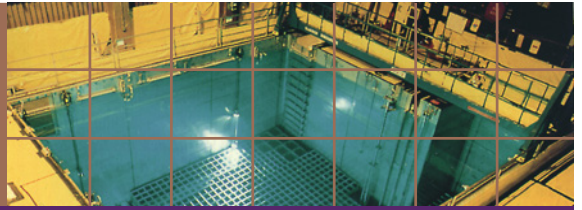
The NRC completed its evaluation of the quality of technical reports submitted by the Department of Energy and issued a report of its findings. That report stressed to the Department of Energy the importance of improving the quality of the information that would support a potential license application.

The NRC maintained and improved its Electronic Information Exchange capability and Agencywide Documents Access and Management System that enable the electronic receipt, processing, and review of High-Level Waste documentary material. The NRC established a comprehensive test lab for conducting end to end testing of the information systems that will support further agency processing, review and adjudication of the application. The NRC also revised the Commission's Rules of Practice in 10 CFR Part 2, Subpart J, to establish specific requirements and standards for the electronic submission of adjudicatory materials to the electronic hearing docket by parties to the high-level licensing proceeding. Particular focus was given to filings that will be of a size and nature that will create transmission, viewing, or downloading challenges for the NRC staff, parties, and the public, such as the Department of Energy's license application and supporting materials.

The NRC certified, per 10 CFR Part 2, Subpart J requirements, that its relevant High-Level Waste documents were made available via the Licensing Support Network, an Internet-based system that provides access to all relevant information concerning the potential repository at Yucca Mountain.

In anticipation of receiving the Department of Energy's application for a high-level waste repository at Yucca Mountain, the NRC is currently constructing a 15,000 square foot hearing facility in Las Vegas, Nevada to support adjudicatory hearings. The hearings are scheduled to begin in FY 2005.

The NRC is investing in a Digital Data Management System that will provide the necessary technology and functionality for the agency to meet its obligation to conducting the adjudicatory proceeding regarding the Department of Energy's application for construction of a high-level waste repository at Yucca Mountain, Nevada. The Digital Data Management System will provide information technology and audio/visual capabilities in at least two hearing rooms (one in the Las Vegas area so as to be in the vicinity of the Yucca Mountain site; a second at NRC



NUCLEAR WASTE SAFETY

Headquarters in Rockville, Maryland); enable the creation and use of an integrated, comprehensive digital record for the high-level waste repository licensing proceeding; record, store, and display the text and image of documents presented in the hearing; permit access and retrieval of the entire record; allow counsel for the parties to bring prepared materials to the evidentiary hearing electronically; and provide continual real-time access to the hearing record by the presiding officer and distribution to the parties in the litigation.

PACKAGE PERFORMANCE STUDY

The NRC is currently studying the performance of spent nuclear fuel transportation packages under accident conditions, including high-speed impact and fire. In connection with that study, the NRC published NUREG-1768, "United States Nuclear Regulatory Commission Package Performance Study Test Protocols," for public comment in February 2003. NUREG 1768 contained a draft proposal for the content and conduct of the test program, as well as the analyses to support the test program.

In May 2004, the NRC approved full-scale testing of a single NRC-certified spent fuel rail transportation cask. The testing is to utilize a single full-scale NRC-certified rail transportation cask of a type currently being used, or expected to be used in the foreseeable future, to transport spent nuclear fuel. The demonstration test is to be realistic, and include a fully engulfing fire.

The NRC continues to interact with the Department of Energy to ensure that the NRC's research will support the latest Department of Energy strategy on spent nuclear fuel shipment. The research results will be available before the initiation of spent nuclear fuel shipment to a potential Yucca Mountain repository.

DECOMMISSIONING AND LOW-LEVEL WASTE MANAGEMENT

Decommissioning involves removing radioactive contamination from buildings, equipment, groundwater, and soil to levels that permit the release of the property with or without restrictions on its future use. This program includes both power and nonpower reactors, as well as materials and fuel facilities. The NRC terminates the license for decommissioned facilities after the licensees demonstrate that the residual onsite radioactivity is within the regulatory limits and sufficiently low to protect the health and safety of the public and the environment. The criteria for terminating a license are defined in Subpart E of 10 CFR Part 20.

The NRC conducts decommissioning licensing and inspection activities for commercial nuclear facilities that are currently in the decommissioning process. Licensing actions require NRC review and approval before they can be implemented by licensees. By conducting inspections,

PROGRAM PERFORMANCE

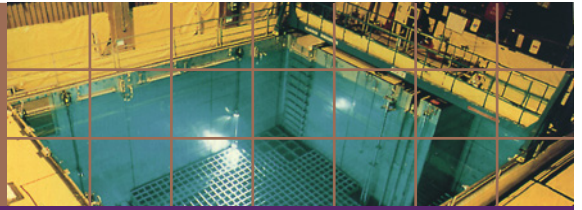
the NRC evaluates the licensee's ability to store or dismantle and decontaminate the facility safely, while still maintaining the licensed configuration of the facility and managing the use of decommissioning funds as described in the regulations. In particular, the decommissioning program focuses on resolving key issues (including dose assessments for remediated sites), evaluating institutional controls for restricted-use sites, reviewing decommissioning plans, conducting environmental reviews, and preparing environmental impact statements, as appropriate.

The NRC implemented a comprehensive decommissioning program with well-defined procedures, standards, and oversight to ensure that all sites receive the appropriate level of review.

The NRC completed follow-on activities associated with the FY 2003 reviews of the decommissioning program and the License Termination rule. To address the issues identified in the analysis of the License Termination rule, the NRC issued a regulatory issues summary in June 2004 that informed licensees and other stakeholders of the options available for use in resolving the license termination issues as well as plans for future actions (including guidance and rulemaking) and plans to further risk-inform the implementation of the License Termination rule. The NRC also drafted an integrated plan that identifies the actions and activities required to address the programmatic issues identified in the FY 2003 decommissioning program evaluation.

The NRC implemented the use of more realistic exposure scenarios in evaluating compliance with the License Termination rule and approved an "industrial use" scenario for use in evaluating the Fansteel facility in Muskogee, Oklahoma. Approval of that scenario will facilitate the cleanup of the site in a manner that protects the health and safety of the public and the environment. In addition, the NRC determined that a more realistic exposure scenario could be used to determine compliance with the dose criteria at the contaminated Kiski Valley Water Pollution Control Authority facility in Vandergrift, Pennsylvania. The Commission is currently applying more realistic scenarios at two sites in Michigan.

In the area of low-level-waste, the NRC decided to defer rulemaking on assured isolation facilities for long-term storage of low-level waste based on a determination that there is insufficient need for such facilities at this time. Instead, the agency will annually assess the need for, and interest in, such facilities for the long-term storage of low-level waste as well as the State and Compact views and industry interest in evaluating the need for rulemaking and/or regulatory guidance. The NRC will also participate, as appropriate, with the Conference of Radiation Control Program Director's Inc. in the development of a suggested State regulation.



NUCLEAR WASTE SAFETY

The NRC completed two safety evaluation reports for the Millstone Power Station's missing spent fuel rods. Dominion Nuclear, the current licensee for the Millstone plant, determined that off-site disposal (at either the Barnwell, South Carolina, or Hanford, Washington low-level waste disposal facilities) was one possibility for the location of the missing spent fuel segments. Consequently, the agency issued its related safety evaluation reports in coordination with the Environmental Protection Agency, Department of Energy, and the States of South Carolina and Washington. Those reports address the potential impacts of disposing of fuel at a low-level waste burial site and concluded that there would be minimal impact and no need for further action in this instance.

The NRC staff continued to evaluate the public comments concerning disposition of solid materials and is currently working to develop environmental impact information related to several alternatives for proceeding as well as implementing guidance related to those alternatives.

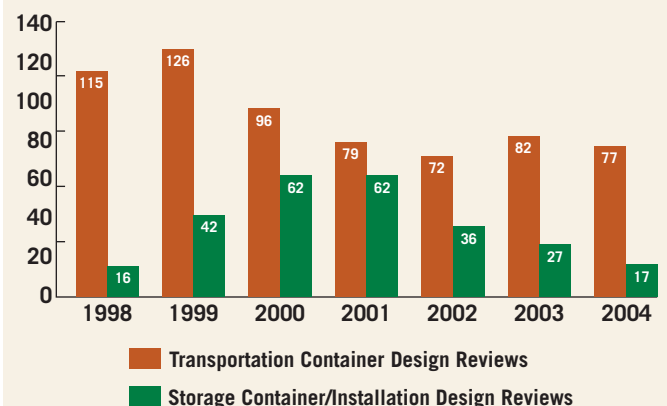
SPENT FUEL STORAGE AND TRANSPORTATION LICENSING AND INSPECTION

Millions of shipments of radioactive materials are safely and securely transported each year within the United States. Several Federal agencies share responsibility for regulating the safety and security of those shipments. The NRC closely coordinates its transportation-related activities with those of the Department of Transportation and, as appropriate, the Department of Energy. To carry out its regulatory responsibilities for spent fuel storage and radioactive material transportation, the NRC certifies and inspects both transport container package designs and spent fuel storage cask designs. The NRC also licenses and inspects the interim storage of spent fuel at both reactor sites and away-from-reactor sites. This helps to ensure that licensees provide safe interim storage of spent reactor fuel and transport nuclear materials in packages that provide a high degree of safety.

The NRC completed 77 transport container design reviews and 17 storage container and installation design reviews during FY 2004.

The NRC completed rulemakings associated with certificate of compliance amendments for five different storage cask designs. These rulemakings and amendments address the storage needs of specific utilities intending to use the modified storage cask designs.

STORAGE AND TRANSPORTATION DESIGN REVIEWS COMPLETED



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The NRC issued a final rulemaking to revise 10 CFR Part 71 to make U.S. transportation and safety requirements compatible with the most recent international standards issued by the International Atomic Energy Agency and to include other changes initiated by the NRC.

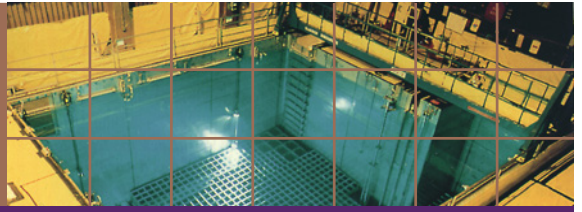
The NRC and the Department of Transportation held a joint public workshop to discuss operational concerns for implementing 10 CFR Part 71 as well as Title 49 of the Code of Federal Regulations. Both regulations became effective on October 1, 2004.

As a co-U.S. representative, along with the Department of Transportation, to the International Atomic Energy Agency's Transportation Safety Standards Committee, the NRC is actively participating in an International Atomic Energy Agency effort to conduct a 2-year review and revision of the international standards for transporting radioactive material.

The NRC devoted significant effort to the Private Fuel Storage license application to construct and operate an away-from-reactor independent spent fuel storage installation on the Reservation of the Skull Valley Band of Goshute Indians, a Federally recognized Indian tribe. As a result of a March 2003 ruling of the Atomic Safety and Licensing Board Panel, which required the applicant to demonstrate that a military aircraft crash would not pose a significant threat to the facility, the applicant submitted an analysis of the consequences of an F-16 aircraft crash at the proposed facility. The NRC reviewed the probabilistic, structural, and fire consequence analyses of an F-16 crash provided by both the applicant and the State of Utah. The NRC also completed independent confirmatory analyses of an F-16 crash, with contractor support from the Sandia and Oak Ridge National Laboratories. The Atomic Safety and Licensing Board Panel hearings on the aircraft crash consequence issue were completed in mid-September, 2004. The Atomic Safety and Licensing Board Panel decision is expected by the end of January 2005.

The NRC completed and issued a final environmental impact statement and a draft safety evaluation report for an independent spent fuel storage installation located on the site of the Department of Energy's Idaho National Engineering and Environmental Laboratory. Spent nuclear fuel and associated radioactive material from the Unit 1 High-Temperature Gas-Cooled Reactor at the Peach Bottom Atomic Power Station; the Shippingport Atomic Power Station; and various training, research, and isotope reactors would be repackaged and stored at the proposed Idaho Spent Fuel Storage Facility. The draft safety evaluation report and the final environmental impact statement would support a recommendation for issuance of a license under 10 CFR Part 72.

The NRC continued to support the National Academy of Sciences studies on: (1) the risks of transporting high-level waste including spent fuel, and (2) the safety and security of spent fuel



NUCLEAR WASTE SAFETY

storage. The objective of the first study is to develop an independent high-level synthesis of the key technical and societal concerns regarding spent fuel and high-level radioactive waste transportation and to identify technical and policy options for addressing those issues and managing transportation risk. The insights gained from the study could be used to focus the NRC's future programmatic goals and outreach efforts. The second study was mandated by Congress to evaluate the safety and security of wet pool storage and dry storage including single-dual and multi-purpose canisters and casks. A classified version of the study report was issued in mid-July 2004, with a non-classified version scheduled to be issued by the end of December 2004.

WASTE SAFETY RESEARCH

The Waste Safety Research Program supports a number of the NRC's nuclear waste programs. Ongoing research studies involve the development of information and tools to assess the movement of radionuclides in the environment resulting from decommissioning and waste management activities and the assessment of dose to the public associated with those activities.

The NRC implemented several improvements in dose modeling capability to improve the agency's ability to estimate more realistically the potential long-term impact of radionuclides in the environment and enhance the agency's decision-making in terminating licenses.

The NRC will complete a significant revision of the agency's probabilistic risk assessment of a dry cask storage system, which will include more realistic analysis in response to related peer review comments. The staff currently plans to present its findings to the Advisory Committee on Nuclear Waste in FY 2005 before issuing the draft report for public comment. The draft study determined that a stainless steel welded canister with a concrete overpack poses a very low risk to the public.

ANNUAL GOALS AND MEASURES

Strategic Goal: Prevent significant adverse impacts from radioactive waste to the current and future health and safety of the public and the environment and promote the common defense and security.

STRATEGIC GOAL RESULTS

The NRC has established four measures to determine whether the agency has met its Nuclear Waste Safety strategic goal. These are top-level measures that define the NRC's success in overseeing radioactive waste. The goal of the NRC's regulatory efforts is to prevent the occurrence of any of the events described in the measures that follow.

PROGRAM PERFORMANCE

Measure	2001	2002	2003	2004
1-1 No deaths resulting from acute radiation exposure from radioactive waste. ³⁰	0	0	0	0
1-2 No events resulting in significant radiation exposure ³¹ from radioactive waste.	0	0	0	0
1-3 No releases of radioactive waste causing an adverse impact on the environment. ³²	0	0	0	0
1-4 No losses, thefts, diversion, or radiological sabotage ³³ of special nuclear material or radioactive waste.	0	0	0	0

Results: The NRC has met all of the strategic goal measure targets.

PERFORMANCE GOALS

In addition to our strategic goals, the NRC has a set of four performance goals and associated performance measures for Nuclear Waste Safety.

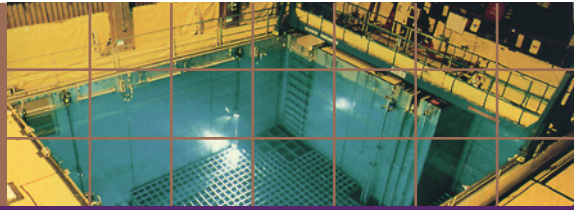
- (1) Maintain safety, protection of the environment, and the common defense and security.
- (2) Increase public confidence.
- (3) Make NRC activities and decisions more effective, efficient, and realistic.
- (4) Reduce unnecessary regulatory burden on stakeholders.

PERFORMANCE GOAL RESULTS

Performance Goal-1: Maintain safety, protection of the environment, and the common defense and security.

Measure	2001	2002	2003	2004
1-1 No events resulting in radiation overexposures from radioactive waste that exceed applicable regulatory limits. ³⁴	0	0	0	0
1-2 No breakdowns of physical protection resulting in a vulnerability to radiological sabotage, theft, diversion, or loss of special nuclear materials or radioactive waste. ³⁵	0	0	0	0
1-3 No radiological releases to the environment from operational activities that exceed the regulatory limits. ³⁶	0	0	0	0
1-4 No instances where radioactive waste and materials under the NRC's regulatory jurisdiction cannot be handled, transported, stored, or disposed of safely now or in the future. ³⁷	0	0	0	0

Results: The NRC has met all of the performance goal measure targets.



NUCLEAR WASTE SAFETY

1-1 Radiation Overexposures: No radiation overexposures from radioactive waste exceeded regulatory limits in FY 2004 or in any year since data collection began under the Government Performance and Results Act in FY 1997. This measure focuses on events that could result in overexposures of the public or workers.

1-2 Breakdowns of Physical Protection: No breakdowns of physical protection resulted in a vulnerability to radiological sabotage, theft, diversion, or loss of special nuclear materials or radioactive waste in FY 2004, or in any year since data collection began under the Government Performance and Results Act in FY 1997. Events considered under this performance measure include those that may compromise public health and safety by creating a vulnerability to radiological sabotage, theft, diversion, or loss of special nuclear materials or radioactive waste.

1-3 Radiological Releases: No radiological releases to the environment from operational activities exceeded the regulatory limits in FY 2004 or in any year since data collection began under the Government Performance and Results Act in FY 1997.

1-4 Handling of Radioactive Waste and Materials: There were no instances in which the NRC failed to provide an adequate regulatory framework for the safe handling, transportation, storage, or disposal of radioactive waste and materials under the agency's regulatory jurisdiction in FY 2004 or in any year since data collection began under the Government Performance and Results Act in FY 1997.

Performance Goal-2: Increase public confidence.

Measure	2001	2002	2003	2004 ¹
2-1 Complete milestones related to collecting, analyzing, and trending information for measuring public confidence.	Met	Met	Met	Met
2-2 Complete all of the public outreaches.	Met	Met	Met	Met
2-3 Issue Director's Decisions for petitions filed to modify, suspend, or revoke a license under 10 Code of Federal Regulation 2.206 ³⁸ within an average of 120 days. ³⁹	NA	Not met	Met	NA

Results: The NRC has met all of the performance goal measure targets.

PROGRAM PERFORMANCE

2-1 Measuring Public Confidence: The FY 2004 target for this performance measure is to “Create a Web-based system to compile and analyze trends in the responses of the feedback forms to assess the agency’s meeting performance.” The NRC’s has analyzed the data, and the results were transmitted to the staff.

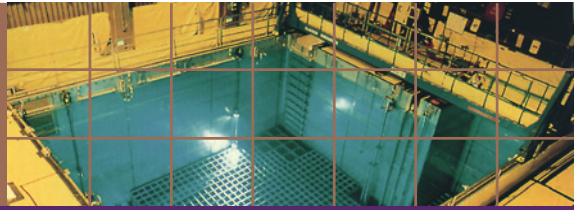
2-2 Public Outreach: Public outreach meetings give the public opportunities for meaningful participation in NRC activities, and give the NRC a means to provide the public with information concerning those activities. In FY 2004, the NRC held over 40 public outreach meetings associated with this measure.

Public meetings held to communicate the NRC’s role in the potential licensing of the proposed geologic high-level waste repository at Yucca Mountain, Nevada, included an open house meeting, a public outreach presentation, a workshop for tribal representatives on the licensing process and technical issues associated with the proposed repository, and a presentation to the National Conference of State Legislatures High-Level Waste Working Group.

In FY 2004, outreach efforts associated with the Package Performance Study continued with resolution of more than 250 comment letters and concerns expressed at public meetings conducted during FY 2003 on NUREG-1768, “United States Nuclear Regulatory Commission Package Performance Study Test Protocols.” During FY 2004, the NRC continued to engage the public through related presentations at the Waste Management ‘04 Symposium, the Department of Energy’s Technical Exchange Committee meeting in April 2004, the May public meeting of the National Academy of Sciences Study on Transportation of Radioactive Material, and several other meetings with State and local governments.

Through September 2004, the NRC participated in more than 30 workshops, conferences, and town hall meetings with representatives of various Federal, State, and local agencies; international bodies; the nuclear industry; and public interest groups focused on spent fuel storage and transportation issues. The NRC conducted several public meetings with interested stakeholders on various sites or projects undergoing environmental review or scoping processes; these activities included the West Valley Demonstration Project and controlling the disposition of solid materials.

In addition, as co-chair of the Interagency Steering Committee on Radiation Standards, the NRC arranged and hosted the Committee’s annual public workshop in June 2004. The Committee conducts its annual meeting to give stakeholders an opportunity to offer input concerning issues to be reviewed by the many participating Federal agencies with radiation safety responsibilities. As a separate public outreach effort, the NRC upgraded the Web site of the Interagency Steering Committee on Radiation Standards. The newly designed website



NUCLEAR WASTE SAFETY

(www.iscors.org) will facilitate general communications among members of the Interagency Steering Committee on Radiation Standards, its subcommittees, and stakeholders throughout the United States.

To further facilitate communication with stakeholders in FY 2004, the NRC augmented its public Web site to include semiannual reports related to the rulemaking for the control of the disposition of solid material, along with notice of and links to NUREG/CR-6682, “Summary and Categorization of Public Comments on Controlling the Disposition of Solid Materials.” The March 2004 Scoping Summary Report, which is also available on the Web site, provides a concise summary of the public comments received on the scope of the generic environmental impact statement as well as the alternatives and environmental impacts that the generic environmental impact statement should address.

2-3 Director’s Decisions: The third measure assesses the timeliness of the Director’s Decisions regarding petitions to modify, suspend, or revoke a license under 10 CFR 2.206. The NRC received no petitions in FY 2004 in the Nuclear Waste Safety program.

Performance Goal-3: Make NRC activities and decisions more effective, efficient, and realistic.

Measure	2001	2002	2003	2004
3-1 Complete specific waste milestones in the Risk-Informed Regulation Implementation Plan.	Met	Met	Met	Met
3-2 Complete at least two key process improvements per year in selected program and support areas that increase effectiveness, efficiency, and realism.	Met	Met	Met	Met
3-3 Complete all major precicensing milestones needed to prepare for a licensing review of the potential Yucca Mountain repository, consistent with Department of Energy’s schedules and before Department of Energy submits its license application.	Not met	Not met	Met	Met

Results: The NRC has met all of the performance goal measure targets.

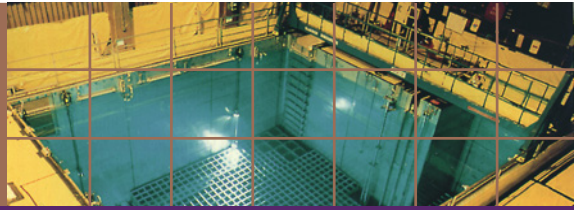
3-1 Risk-Informed Regulation: This measure focuses on progress in developing a coordinated approach to implementing risk-informed decisions throughout the agency’s regulatory processes. The NRC completed the specific Nuclear Waste Safety milestones identified for each fiscal year in the Risk-Informed Regulation Implementation Plan on schedule. Specific activities included updating the plan in April 2004; briefing the Commission on the status of risk-informed

PROGRAM PERFORMANCE

activities in October 2003, March 2004, and April 2004; using risk insights to conduct an independent assessment of certain documents that will be used to support the agency's review of a Department of Energy license application for a repository at Yucca Mountain; completing the progress report/computer manual for the Preclosure Safety Assessment Tool; and implementing the recommendations from the License Termination rule analysis and the decommissioning program evaluation conducted in 2003.

3-2 Process Improvements: This measure concerns actions to improve the NRC's internal processes. This year, the NRC completed three process improvement reviews. For the first such review, the NRC's Office of Nuclear Material Safety and Safeguards conducted an assessment of its recruitment processes. The challenge was to ensure that the office could continue to recruit the staff it needs to accomplish its mission, given that only limited resources were available for recruitment. The review resulted in recommendations to: (1) continue to focus on local recruitment opportunities; (2) continue to focus on events and activities that have historically been successful; (3) encourage the staff to develop relationships with colleges and universities that offer academic programs that meet our critical skills needs; (4) continue to advertise available positions in appropriate newspapers, magazines, and trade journals; (5) look for opportunities to expand routine NRC business activities to include recruitment efforts (e.g., if a business meeting is taking place near a college/university with a program that meets our critical skills needs, the staff could arrange to meet with professors and/or students to talk about career opportunities); and (6) develop informational materials that target specific skills and career opportunities so that information is readily available even if the staff is not able to attend a recruitment event. The NRC anticipates that implementing these recommendations will enhance the office's recruitment process and continue to ensure that the Office of Nuclear Material Safety and Safeguards meets its staffing needs.

In another process improvement effort, culminating an FY 2003 business process improvement review, the NRC's Office of Nuclear Material Safety and Safeguards implemented several recommendations to improve the effectiveness of the spent fuel transportation and storage technical review process. Examples include actions to promote closer team involvement during the review process and more realistic scheduling of review milestones, given the complexity of the issues and the technical disciplines needed for the review. In another review associated with the spent fuel transportation and storage program, the Office of Nuclear Material Safety and Safeguards developed a master inspection plan that integrates headquarters and regional responsibilities related to the scope, frequency, and prioritization philosophy for the inspection programs conducted under 10 CFR Part 71 ("Packaging and Transportation of Radioactive Material") and Part 72 ("Licensing Requirements for the Independent Storage of Spent Nuclear Fuel").



NUCLEAR WASTE SAFETY

In the third process improvement initiative, the Office of Nuclear Material Safety and Safeguards undertook efforts to improve the manner in which the NRC conducts its decommissioning program. These included improving the process for requests for technical assistance from other NRC offices and implementing the comprehensive decommissioning program approach to managing decommissioning at licensed and unlicensed sites.

3-3 Prepare for Licensing Review of Potential Yucca Mountain Repository: The milestone established for FY 2004 was to certify the NRC's documentary material for the purposes of the Licensing Support Network 1 month after the Department of Energy certified its document collection. DOE certified its collection on June 30, 2004, but on August 21, 2004, an Atomic Safety and Licensing Board struck DOE's certification. Nonetheless, the NRC certified its documentary material on July 31, 2004 and thus, met this milestone on time.

Performance Goal-4: Reduce unnecessary regulatory burden on stakeholders.

Measure	2001	2002	2003	2004
4-1 Complete those specific milestones to reduce unnecessary regulatory burden.	Met	NA	Met	NA

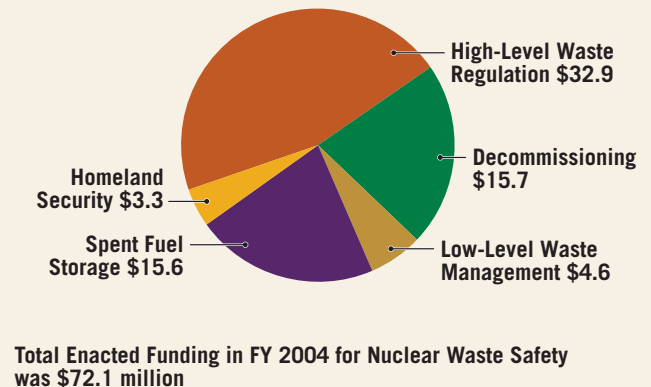
Results: The NRC has met the performance goal measure target.

4-1 Reduce Burden: The FY 2004 Performance Plan identified one milestone for this performance goal measure in FY 2004. Specifically, "If an application to adopt Standard Technical Specifications for a specific spent fuel dry storage cask design is received, the NRC will perform an acceptance review. If the application is acceptable, staff will commence its review of the application, to implement the Standard Technical Specifications, if the design is approved." As of September 30, 2004, the NRC had received one applications to adopt a modified version of the Standard Technical Specifications.

FUNDING FOR ACHIEVING GOALS

The Nuclear Waste Safety budget totaled \$72.1 million in FY 2004. This budget was allocated to five key programs, each of which plays a specific role in protecting the health and safety of the public and the environment from radioactive waste. Most

BUDGET AUTHORITY BY PROGRAM in Millions



PROGRAM PERFORMANCE

of the funding was budgeted for high-level waste regulation and spent fuel storage and transportation. The regulation of decommissioning accounted for about one-quarter of the funding, and low-level waste management and homeland security made up the remainder.

PROGRAM EVALUATION

The NRC's Strategic Plan did not contain any program evaluations for the Nuclear Waste Safety program in FY 2004. Nonetheless, the NRC continued to evaluate the decommissioning program.

As a follow-up to the FY 2003 program evaluation of the decommissioning process, in FY 2004, the NRC incorporated the Site Decommissioning Management Plan sites into a comprehensive decommissioning program that includes routine decommissioning sites, formerly licensed sites, Site Decommissioning Management Plan sites, non-routine/complex sites, fuel cycle sites, and test/research and power reactors. This comprehensive decommissioning program facilitates the cleanup of routine and complex sites in a manner that is consistent with the goals of the former Site Decommissioning Management Plan and the related Action Plan.

In addition, to address the recommendations from the FY 2003 decommissioning program evaluation, in FY 2004, the NRC drafted an integrated plan to identify activities and schedules. The agency also completed initial follow-on activities associated with its 2003 evaluation of the issues impacting the implementation of Subpart E of 10 CFR Part 20 (the License Termination rule), which included developing a regulatory issues summary to inform licensees and other stakeholders of the License Termination rule analysis and future follow-on activities.

INTERNATIONAL NUCLEAR SAFETY SUPPORT

Strategic Goal: Support U.S. interests in the safe and secure use of nuclear materials and nuclear nonproliferation.

OVERVIEW

The International Nuclear Safety Support program encompasses the formulation and implementation of regulatory policy concerning international nuclear safety, import/export licensing for nuclear materials and equipment, treaty implementation, and deterrence of nuclear proliferation. It also encompasses information exchange and safety and safeguards cooperation and assistance. The international activities of the NRC support broad national interests of the United States as well as the domestic mission of the agency.



INTERNATIONAL NUCLEAR SAFETY SUPPORT

MAINTAINING A PROGRAM OF INTERNATIONAL COOPERATION

The NRC maintains a program of international cooperation to enhance the safe, secure, and environmentally acceptable civilian uses of nuclear energy both within the United States and throughout the world. This program includes working with international organizations, such as the International Atomic Energy Agency and the Nuclear Energy Agency.

The International Nuclear Safety Support program also encompasses the issuance of import/export licenses. This responsibility includes activities to ensure compliance with statutes, treaties, conventions, and agency agreements for cooperation. It also supports the work of the Agency for International Development as it relates to the countries of Europe and Eurasia.

As the regulator of the world's largest civilian nuclear program, the NRC has extensive regulatory experience to contribute to other nations' programs in such areas as nuclear reactor safety, nuclear safety research, radiation protection, nuclear materials safety and safeguards,⁴⁰ nuclear facility and materials security, transportation, waste management, spent fuel storage, and decommissioning of nuclear facilities. In addition, the NRC supports the development and implementation of international regulatory standards, policies, and practices. The NRC, in turn, can learn from the regulatory experiences of other countries. Toward that end, the NRC gains access to non-U.S. safety, security, and safeguards information through interaction with foreign entities, thereby leveraging the agency's resources.

The NRC participated extensively in developing the Code of Conduct for the Safety and Security of Radioactive Sources, which the International Atomic Energy Agency published in its final form in January 2004.

At the 2002 IAEA General Conference, with the strong support of the U.S., a Resolution was passed which endorsed a document entitled "Guidance on the Import and Export of Radioactive Sources." The Resolution also noted that more than 30 countries have made clear their intention to implement effective import and export controls by December, 2005. (Note: For the U.S. Government, NRC has published in the Federal Register a proposed rule which fully meets the intent of the General Conference Resolution.)

NRC staff representatives met with the Russian Federation's Federal Service for Nuclear Oversight (formerly Gosatomnadzor) to discuss strengthening the security and regulatory control of high-risk radioactive sources in Russia.

PROGRAM PERFORMANCE

NRC staff representatives participated in a conference in Morocco, to discuss activities aimed at implementing the international standards for radiation safety and security of radioactive sources.

The NRC participated in an International Atomic Energy Agency Operational Safety Review Team “premission” to China and an Operational Safety Review Team mission to the Ukraine; a follow-up International Regulatory Review Team mission to Armenia; and a Transport Safety Appraisal Service mission to France.

In March 2004, the International Atomic Energy Agency put in place an international action plan on transportation safety, which will strategically shape international transport and commerce over the next several years. The NRC, in cooperation with the Departments of Transportation, State, and Energy, had a lead role in ensuring that the action plan addressed U.S. interests and objectives. The Expert Group on International Nuclear Liability was also formed as a result of these activities.

In March 2004, NRC staff representatives participated in the 17th International Atomic Energy Agency Waste Safety Standards Committee meeting. One of the outcomes of the meeting was the approval of DS161 in August 2004 and is now RS-G-1.7, “Application of the Concepts of Exclusion, Exemption, and Clearance,” and the recommendation to forward RS-G-1.7 for publication, subject to the changes agreed to at the meeting.

As a result of the NRC’s participation in the biennial Nuclear Energy Agency Steering Committee Meetings in 2004, and the leadership roles of the NRC’s senior management in three key technical committees, the NRC staff continued to negotiate the Nuclear Energy Agency’s Strategic Plan to identify possible additions to the plan to foster better resource leveraging, with emphasis on programs that will ultimately benefit the technical work conducted by the United States.



INTERNATIONAL NUCLEAR SAFETY SUPPORT

ANNUAL GOALS AND MEASURES

Strategic Goal-1: Support U.S. interests in the safe and secure use of nuclear materials and nuclear nonproliferation.

STRATEGIC GOAL RESULTS

The NRC has established the following three measures to determine whether the agency has met its strategic goal in the International Nuclear Safety Support arena.

Measure	2001	2002	2003	2004
1-1 Fulfill 100 percent of the significant obligations over which the NRC has regulatory authority arising from statutes, treaties, conventions, and Agreements for Cooperation.	100%	100%	100%	100%
1-2 No significant proliferation incidents attributable to some failure of the NRC.	0	0	0	0
1-3 No significant safety or safeguards events that result from the NRC's failure to implement its international commitments.	0	0	0	0

Results: The NRC has met all of the strategic goal measure targets.

1-1. Significant Obligations: The NRC carried out 100 percent of the significant obligations over which it has regulatory authority arising from statutes, treaties, conventions, and agreements for cooperation⁴¹ during FY 2004. For example, the NRC facilitated the timely processing of all export license applications and provided timely comments to the Executive Branch when consulted on proposed international nuclear agreements and technology transfers. In addition, the staff prepared the U.S. National Report in anticipation of the agency's participation in the Third Review Meeting of the Contracting Parties under the Convention on Nuclear Safety to be held in Vienna, Austria, in April 2005.

The NRC also participates in the development of other international legal framework documents. In November 2003, for example, the NRC participated in the Review Meeting of Contracting Parties to the Joint Convention on the Safety of Spent Fuel Management and Radioactive Waste Management to conduct a peer review of the ratifying parties' national safety programs for management of spent fuel and radioactive waste. Currently, an interagency working group, comprising staff representatives from the NRC, the Department of Energy, and the Environmental Protection Agency, is revising the U.S. National Report, which is due to the International

PROGRAM PERFORMANCE

Atomic Energy Agency by October 15, 2006. The peer review process proved to be a very valuable experience for participants, who all gained important insights on issues associated with the safety of spent fuel and radioactive waste management.

The NRC also participated in defining the International Atomic Energy Agency's Safeguards Additional Protocol and is responsible for ensuring compliance with the U.S.-International Atomic Energy Agency Safeguards Agreement by facilitating licensee inspections by and reporting to the International Atomic Energy Agency. The International Atomic Energy Agency conducted monthly inspections at one licensee's facility, four additional licensees provided monthly reporting of materials accounting data, and all licensees provided monthly reporting of imports and exports of nuclear materials. The NRC's portion of the list of U.S. facilities eligible for International Atomic Energy Agency safeguards has been reviewed and updated to include NRC-licensed facilities that are not of direct national security significance. The NRC also initiated discussions regarding the commitments for International Atomic Energy Agency safeguards at centrifuge enrichment plants.

1-2. Proliferation: The NRC achieved its second performance measure in FY 2004. Reports by the U.S. Government, the International Atomic Energy Agency, and other authoritative international organizations did not attribute any significant proliferation incidents⁴² to any failure by the NRC.

1-3. Safety or Safeguards Events and Support: In FY 2004, no significant safety or safeguards events resulted from any failure by the NRC to implement its international commitments. As a result of extensive NRC cooperation and planning with the Department of Energy, on October 1, 2003, the upgraded Nuclear Materials Management and Safeguards System (the national tracking database) was officially implemented. In order to meet U.S. Government commitments to foreign governments as established in peaceful nuclear cooperation agreements, the upgrades included incorporating an improved "Obligations Tracking" mechanism and replacing the outdated country control number format that had been used from 1980 through September 20, 2003. The country control number method needed to be replaced because it was too rigid to accommodate multiple foreign country obligations on a single item or to accommodate portions of material quantities with foreign obligations. In addition, to obtain feedback, resolve issues, and provide guidance regarding the upgrade, the NRC sponsored a special workshop on January 13, 2004, for sponsors and facilities affected by the new reporting format for obligations tracking. The transition to the upgraded system has effectively been accomplished.

The NRC was also instrumental in ensuring that the International Atomic Energy Agency's safeguards implementation goals were achieved at the NRC-licensed highly enriched uranium



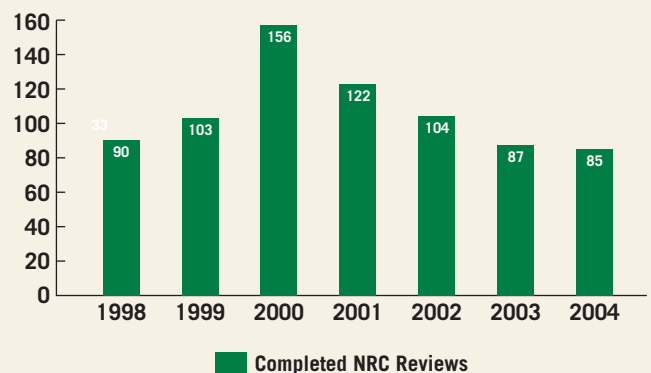
INTERNATIONAL NUCLEAR SAFETY SUPPORT

downblending facility in Lynchburg, Virginia. Effective interactions between the NRC, the facility operator, and the International Atomic Energy Agency resulted in the timely upgrading, repair, and maintenance of International Atomic Energy Agency safeguards equipment and effective verification of nuclear material downblending activities. The NRC supported the Executive Branch in preparing the Additional Protocol and its implementing legislation for submittal for Senate approval. The NRC also participated in preparing documents for submittal to the Senate, meetings with Senate Foreign Relations Committee staff, and Senate hearings. The Senate provided its approval to ratify the treaty on March 30, 2004, and rule changes required for implementing the Additional Protocol at licensee facilities are currently undergoing NRC approval. Completion of the rulemaking awaits Office of Management and Budget approval of the joint NRC-Department of Commerce reporting forms.

The NRC supported bilateral meetings addressing international safeguards policy and technical implementation issues with Japan, the Republic of Korea, Australia, Argentina, Brazil, Germany, France, the United Kingdom, the European Atomic Energy Community, and the International Atomic Energy Agency. In addition, the NRC participated in meetings to evaluate the compliance of key elements of the international safeguards approach for the Rokkasho Reprocessing Plant with the criteria contained in the U.S.-Japan Nuclear Cooperation Agreement.

During FY 2004, the NRC approved several significant export licenses, including licenses authorizing the export of byproduct materials to India (a restricted destination) and two license amendments authorizing the export of highly-enriched uranium for use as target material for medical isotope production. In addition, the NRC approved the export of plutonium to France for use in fabricating four mixed-oxide fuel lead test assemblies, which will ultimately be returned to the United States for irradiation testing in the Catawba nuclear power reactor. The use of these lead test assemblies in a commercial nuclear power reactor will facilitate NRC licensing of commercial-scale mixed-oxide fuel use in the United States. These activities are important to support timely and cost-effective implementation of the U.S.-Russia Agreement on plutonium disposition. As of September 30, 2004, the NRC completed 85 import/export licensing actions undertaken this year within the 60-day processing deadline.

NRC EXPORT/LICENSING ACTIONS COMPLETED



PROGRAM PERFORMANCE

During FY 2004, the NRC successfully concluded five bilateral exchange agreements between the Commission and appropriate foreign counterparts to ensure that an effective framework exists for the agency's international exchanges in FY 2004 and beyond. This effort included renewing the NRC's protocol for exchange of technical information and cooperation in nuclear safety matters with the Chinese National Nuclear Safety Administration as well as the NRC's administrative arrangement for the exchange of classified information with the Canadian Nuclear Safety Commission, both for 5-year periods. Additionally, the NRC developed a new regime for sharing sensitive NRC information with certain foreign government entities.

FUNDING FOR ACHIEVING GOALS

The International Nuclear Safety Support budget totaled \$5.9 million in FY 2004.

PROGRAM EVALUATION

The NRC's Strategic Plan did not identify any program evaluations for International Nuclear Safety Support in FY 2004.

ADDRESSING THE PRESIDENT'S MANAGEMENT AGENDA

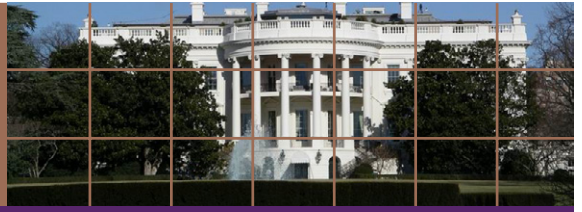
OVERVIEW

The President's Management Agenda prescribed Governmentwide initiatives to reform the United States Government to be more citizen-centered, results-oriented, and market-based, and to actively promote competition rather than stifling innovation. Toward that end, the President identified five initiatives to improve government performance in the areas of: (1) strategic management of human capital, (2) budget and performance integration, (3) competitive sourcing, (4) expanded electronic government, and (5) improved financial management. The NRC has responded to these Governmentwide initiatives, and the following five sections discuss our FY 2004 accomplishments in each of the five areas, respectively.

STRATEGIC MANAGEMENT OF HUMAN CAPITAL

Strategic Alignment

In FY 2004, the NRC updated its Strategic Human Capital and Workforce Restructuring Plan, which describes objectives and strategies for addressing the agency's human capital challenges. This plan aligns with the agency's Strategic Plan for FY 2004–FY 2009 and with the agency's action plans for recruitment, training and development, and diversity management. In accordance



ADDRESSING THE PRESIDENT'S MANAGEMENT AGENDA

with the plan, the NRC continues to identify future human capital investments through the agency's Planning, Budgeting, and Performance Management process.

Workforce Planning and Deployment

Various NRC offices completed changes to their organizational structures that led to improvements in operations. These changes included realignment of functions, reductions in span of control, and elimination of unnecessary layers of management.

Over the past 3 years, the NRC has used a systematic strategic workforce planning process to make significant improvements in the agency's strategic workforce planning methodology and automated system. This approach has resulted in a variety of accomplishments, as described in the following paragraphs.

The strategic workforce planning workgroup conducted briefings for managers and supervisors to share results from responses to the annual strategic workforce planning survey. These briefings featured agencywide best practices, accomplishments, critical skills needs and gap closure strategies and trends, among other topics.

More than 80 percent of the NRC's supervisors, managers, and employees used the automated strategic workforce planning system to identify critical skills and indicate their respective levels of expertise. Based on their input, the strategic workforce planning workgroup has created standard and ad hoc reports to display the data in a user-friendly format. One regional office developed a human capital management program to provide an effective workforce tool for managers and supervisors, and to communicate activities and plans for workforce planning and for other supervisory activities. The resultant plan is available to staff, managers, and supervisors on the agency's internal Web site.

The strategic workforce planning workgroup continues to evaluate end user information to upgrade the strategic workforce planning system. In order to increase communication with the offices as they work together to address critical skill gaps, the workgroup adopted a number of suggestions, including a new supervisor evaluation feedback sheet and a gap analysis tracking form linked to the strategic workforce planning Web page. The workgroup expects these changes to increase its communication with the offices as they work together to address critical skills gaps.

Notably, the Web site sponsored by the Office of Personnel Management mentions the NRC's strategic workforce planning process and the related automated system. As a result, the NRC has received numerous requests for information and has demonstrated its strategic workforce

PROGRAM PERFORMANCE

planning system and methodology to a variety of Federal agencies. This year, for example, the NRC assisted the Library of Congress staff in customizing our strategic workforce planning system for their own future use, and the Commodity Futures Trading Commission has plans to do the same.

Talent

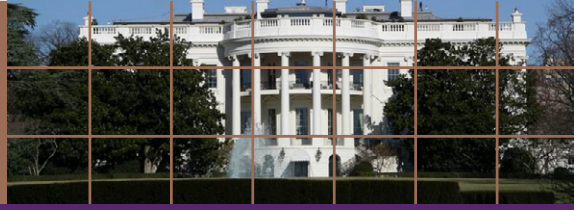
Through a valuable partnership between the program offices and the Office of Human Resources, the NRC continues to take advantage of a wide variety of human capital strategies to address identified critical skill gaps and to meet and/or exceed the agency's human capital goals. These strategies include recruitment and retention incentives, the Cooperative Education Program, the Honor Law Graduate Program, the Graduate Fellowship Program, the Summer Employment Program, rotational assignments, mentoring, and training and development opportunities. These strategies have had a positive impact on the agency's efforts to recruit and retain staff with critical skills. The NRC's attrition rate of 6 percent, which includes external losses (other than retirements) of 1.5 percent, is among the lowest attrition rates in the Federal Government according to a recent report issued by the American University's Institute for the Study of Public Policy Implementation.

The NRC offers a wide range of flexible work options and employee-friendly programs and policies designed to make the NRC a workplace of choice and to enhance organizational effectiveness. These programs include flexible workplace options, adjustable work schedules, health and fitness centers, employee assistance, and child care tuition assistance, among others.

Results from the NRC's annual strategic workforce planning needs survey revealed that recruitment and training/development are the strategies that the agency's various offices most commonly use to address human capital challenges and ensure that the staff has the skills needed to fulfill the agency's mission. Sufficient training courses were scheduled to address identified needs. As a result, the NRC participated in more than 60 recruitment events to recruit diverse and highly qualified individuals for the agency's mission-critical occupations.

Leadership and Knowledge Management

The NRC provides technical and professional training based on results from an annual training needs survey to support the agency's formal qualification and development programs and to enhance the technical and professional competencies needed to carry out the agency's activities. The NRC also uses knowledge management and succession planning strategies to close identified critical skill gaps and to ensure continuity of leadership.



ADDRESSING THE PRESIDENT'S MANAGEMENT AGENDA

Towards that end, the NRC has made substantial progress in implementing a variety of initiatives and tools to create a knowledge-sharing culture. This year, the NRC included knowledge management as part of its annual strategic workforce planning and training needs survey to facilitate the collection of knowledge management information.

The NRC established a knowledge management Web page, which will serve as a focal point for sharing information concerning knowledge management and the various innovative methods being used both within and outside of the NRC to capture and transfer critical knowledge among employees and stakeholders. As the agency's knowledge management efforts evolve, this Web page will also serve as a portal to link together the NRC's various knowledge communities.

The NRC continues to offer leadership competency development programs, such as the Senior Executive Service Candidate Development Program and the Leadership Potential Program. These programs comprise a critical aspect of the NRC's succession and leadership development strategies to ensure that leaders are ready to assume future mid-level and senior-level leadership positions throughout the agency. Notably, the agency has successfully placed 91 percent of 2003 Senior Executive Service Candidate Development Program graduates in Senior Executive Service positions and 67 percent of 2002 Leadership Potential Program graduates in supervisory or leadership positions. Currently, the agency has 25 individuals participating in the 2003 Leadership Potential Program and has selected 31 individuals to participate in the 2004 Senior Executive Service Candidate Development Program.

Performance Culture

The NRC implemented a new Senior Executive Service performance management system to improve its value as a management tool and to incorporate legislative changes as well as regulatory changes implemented by the Office of Personnel Management. The new system aligns individual executive accomplishments with the agency's Strategic Plan, Performance Budget, and office operating plans. The expected outcome is to receive certification by the Office of Personnel Management and the Office of Management and Budget that the NRC's system makes meaningful distinctions between the performance of various executives.

In addition, the NRC has a performance management program, which includes agency-level and Governmentwide recognition for high performers at all levels, from Presidential Rank Awards for Senior Executive Service managers to monetary and non-monetary, and recognition awards for other employees.

PROGRAM PERFORMANCE

Accountability

The NRC continues to evaluate how well the agency is succeeding in achieving the human capital goals and outcomes in the areas of recruitment, staffing, retention, and training and development. In addition, the NRC staff briefs the Commission annually on the agency's human capital efforts.

Twice each year, the NRC analyzes and reports to the Commission on the status of workforce statistics by demographic groups over a 5-year period. The analysis includes workforce size and composition, hires, attrition, rotational assignments, performance appraisals, and awards. These statistics are shared throughout the agency.

The NRC's Executive Resources Board provides institutional continuity in executive succession planning and personnel management by overseeing the NRC's Senior Executive and Senior Level System merit staffing. The Board also provides oversight and coordination of all agency work related to the President's Management Agenda.

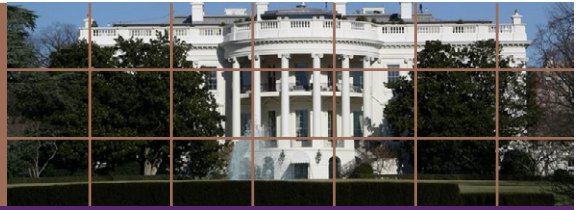
BUDGET AND PERFORMANCE INTEGRATION

The NRC continues to make progress in achieving budget and performance integration in accordance with the President's Management Agenda. This progress includes identifying new outcome-based performance measures aligned with the agency's Strategic Plan for FY 2004–FY 2009, accurately monitoring program performance, and integrating performance information with associated costs. To address these initiatives, the NRC has pursued and completed a number of actions in FY 2004, as discussed in the following paragraphs.

Integrating Planning and Budgeting

The NRC's Planning, Budgeting, and Performance Management process is the fundamental framework for the agency's planning and budgeting activities. This process establishes plans that define clear goals to be accomplished and tracks progress throughout the year to ensure that the NRC achieves the desired results. The process also links the NRC's various budget accounts to the associated goals to identify clearly the budgetary resources that are devoted to each goal.

The NRC continued developing management directives that define the roles and responsibilities of offices and individuals involved in the NRC Planning, Budgeting and Performance Management (PBPM) process. These directives will provide guidance to agency employees on planning, budgeting, and performance management. The NRC expects to complete and implement these management directives in FY 2005.



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Full Budgetary Cost

NRC program managers currently receive cost reports that show the full cost of major programs. These reports allow managers to plan and manage their programs better throughout the budget year. The NRC's Performance Budget presents the "full cost" budget to achieve the agency's goals. The agency's FY 2005 budget request is the first budget submission in which the NRC has shown the full cost at the program level. The NRC will continue to refine the integration of outputs, goals, and assignment of full cost across programs as outlined in the Office of Management and Budget guidance for the FY 2006 budget.

Program Effectiveness

The NRC's Nuclear Materials Users Licensing and Inspection program was evaluated using the Program Assessment Rating Tool promulgated by the Office of Management and Budget. The program was rated effective, which is the highest rating possible. This experience yielded valuable insights for future reviews and evaluations of NRC programs. The NRC has also modified the agency's performance appraisal system for senior executives to improve alignment accountability for performance with achieving organizational objectives. During FY 2004, the NRC established a schedule for Program Assessment Rating Tool reviews and supporting program evaluations through FY 2007.

COMPETITIVE SOURCING

One of the NRC's corporate management strategies is to acquire goods and services in an efficient manner. Toward that end, the NRC has established output measures associated with the implementation of the competitive sourcing initiative under the President's Management Agenda, adopted a performance-based approach to contracting, and posted procurement synopses on the Internet.

In the area of competitive sourcing, the NRC submitted the FY 2003 Federal Activities Inventory Reform Act Inventory to the Office of Management and Budget in June 2003, and received approval from the Office of Management and Budget on May 28, 2004. That inventory identifies 269 commercial activity full-time equivalents, which are available for public-private competition. It was published on the NRC external web site on June 10, 2004. One challenge to the 2003 commercial inventory was received. The NRC rendered its initial decision denying the challenge on August 13, 2004. The FY 2004 Federal Activities Inventory Reform Act Inventory was submitted to Office of Management and Budget on June 30, 2004.

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The NRC revised the Competitive Sourcing Plan based on guidance issued by Office of Management and Budget in July 2003. The NRC subsequently submitted a revised Competitive Sourcing Plan to OMB on December 15, 2003. The NRC will conduct three business case analyses during each fiscal year to determine whether the selected commercial activities are appropriate for public-private competition based on a review of factors outlined in the NRC's Competitive Sourcing Plan. Specific factors include the potential for performance improvement and cost savings, severability of the work from core agency functions, and human capital management. Four Business Case Analyses covering 18 Full-Time Equivalents are planned for completion in FY 2004. If any of the business case analyses conclude that a public-private competition is warranted, the resultant competition will commence in early FY 2005.

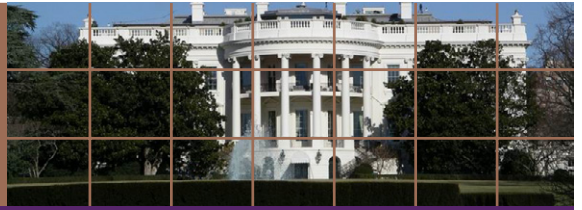
The NRC continues to implement performance-based contracting for facility management services, data entry, information technology, and other support services to give vendors a better understanding of contract requirements. The NRC includes such criteria as measurable performance requirements, quality standards, quality surveillance plans, and provisions for reducing the fee or price when the vendor fails to perform services as required. The NRC continues to exceed the target of 30 percent for eligible service contracting dollars expended through performance-based contracting.

The NRC continues to post on the Governmentwide point-of-entry Web site all required synopses and solicitations for acquisitions valued at more than \$25,000.

EXPANDED ELECTRONIC GOVERNMENT

The NRC actively pursues implementation of expanded electronic government. The NRC has made important strides in utilizing electronic and technological solutions to provide high-quality services to citizens while reducing the cost of delivering those services.

The NRC has evaluated, or is currently participating in 15 of the 25 electronic government initiatives promulgated by Office of Management and Budget. The agency is making substantial progress toward integrating its processes associated with Capital Planning and Investment Control, the Federal Information Security Management Act, and Enterprise Architecture. The NRC has increased the focus on information technology system performance measurement and tracking. The NRC has conducted an "E-Gov gap analysis" to address electronic government requirements and compliance with several related legislative initiatives, such as the Government Paperwork Elimination Act, the Federal E-Gov Strategy, and the Federal Enterprise Architecture.



ADDRESSING THE PRESIDENT'S MANAGEMENT AGENDA

The NRC emphasizes requirements and benefits of electronic government to key staff and managers. Toward that end, the agency has held a series of briefings and discussions with agency personnel to communicate the value of E-Gov initiatives. The NRC has evaluated the alignment of key electronic government requirements with the agency's mission, budget, and architecture; security compliance; interagency coordination; Web applications and information compliance; and Capital Planning and Investment Control compliance for information technology. The NRC has designed a guidance, oversight, and status reporting structure for related activities in order to monitor the agency's progress in furthering the use of electronic government.

E-Gov Initiatives

The NRC completed an examination of agency involvement in individual Presidential Priority Initiatives. At the end of FY 2003, the NRC was participating in 13 such initiatives. Today, we are evaluating, or participating in 15 of the 25 initiatives. The NRC has consistently fulfilled individual project requests related to the Presidential Priority Initiatives and has demonstrated exemplary performance with regard to the payroll consolidation initiative. The NRC has Memoranda of Understanding in place for six initiatives (including Integrated Acquisition Environment, E-Clearance, E-Payroll, E-Travel, E-Training, and Business Gateway) and is currently implementing or reviewing proposed agreements for three additional initiatives (including USA Services, Recruitment-One-Stop, and E-Records Management). Notably, the Inspector General has acknowledged the results of the NRC's payroll consolidation, through which the agency realized a one-time savings of \$1.2 million, and a recurring savings of approximately \$1.0 million. The NRC was the first Federal agency to transfer production payroll operations under the Presidential Priority Initiatives program.

The NRC's communications with the public (particularly with regard to information concerning agency policies and new initiatives) are supported through periodic meetings with stakeholders as well as the agency's public Web site. The NRC has an Agencywide Documents Access and Management System (ADAMS) Users Group, which consists of members of the public who meet twice a year. This forum provides an opportunity to discuss and inform enhancements to ADAMS, which provides public access to all of the agency's publicly available documents. The NRC offers two access paths to ADAMS through the agency's public Web site and via dial-in service.

Capital Planning and Investment Control

In January 2004, the NRC issued a revision of Management Directive 2.2, which documents the NRC's Capital Planning and Investment Control process. Specifically, that revision streamlined the Capital Planning and Investment Control process for information technology

PROGRAM PERFORMANCE

investments utilizing three tiers based on the level of management control and oversight that each investment requires. In accordance with that process, the NRC's major information technology systems now have a business case, and the NRC has validated those business cases against new criteria (Exhibit 300) required by Office of Management and Budget. The NRC will continue to review and adopt OMB guidance in this area, implement necessary changes to the agency's Capital Planning and Investment Control process, and update Management Directive 2.2 as necessary.

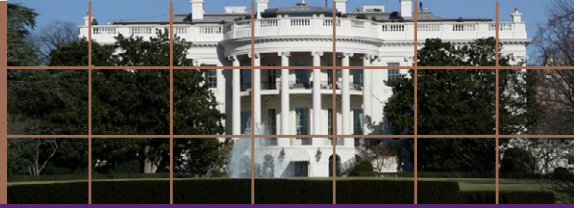
Enterprise Architecture

The NRC has made progress in embracing Enterprise Architecture. The agency refined its Enterprise Architecture activities to reflect Office of Management and Budget guidance and to align related activities with the new Federal Enterprise Architecture. The NRC established an output measure associated with the percentage of Agency Enterprise Architecture data that is aligned with the Office of Management and Budget guidance. The NRC implemented and began populating an automated Enterprise Architecture tool to capture and document the agency's Enterprise Architecture and to identify patterns to aid in decisions concerning information technology investments. The agency specifically designed this tool to provide the necessary reports to facilitate the Capital Planning and Investment Control process, involvement of the Environmental Configuration Control Board, preparation of Office of Management and Budget Exhibit 300 reports, and other processes used for investment planning and decision-making related to information technology.

The NRC moved beyond strengthening the integration of Enterprise Architecture with Capital Planning and Investment Control to develop an integrated policy and streamlined process to link information technology investment decisions to the agency's mission more effectively. The NRC developed Enterprise Architecture strategy documents, including an Enterprise Architecture Revitalization Plan to facilitate Enterprise Architecture progress. In addition, the NRC conducted an Enterprise Architecture Readiness Assessment to validate the agency's Enterprise Architecture strategy and better focus our Enterprise Architecture efforts. The NRC also made significant progress toward completing our integrated Enterprise Architecture, Capital Planning and Investment Control, systems development life cycle, and security integrated policy and processes.

Federal Information Security Management Act

In FY 2004, the NRC continued to maintain compliance with the Federal Information Security Management Act. The agency's major operational applications and general support systems



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meet the requirements of Management Directive 12.5, "NRC Automated Information Systems Program," including a system security plan, contingency plan, certification, and accreditation. The NRC has increased efforts to conduct independent review, testing, and evaluation of major system security plans. Among all Government agencies, the NRC's compliance with the requirements of the FY 2003 Federal Information Security Management Act resulted in the only grade of "A" issued by the House Committee on Government Reform's Subcommittee on Technology, Information Policy, Intergovernmental Relations, and the Census.

The NRC has an effective information technology security training and awareness program. All employees are required to complete an online information technology security training course, and NRC information systems security officers and other employees and support contractors with significant security responsibilities are required to complete a more advanced online technical security course. The NRC established an information technology security Web page, providing information that agency employees need to facilitate timely awareness of information technology security issues. The NRC has a robust incident reporting program in place and files monthly reports to the Federal Computer Incident Response Center. The corrective action plan established under the Federal Information Security Management Act is the primary mechanism that senior agency officials use in managing the agencywide automated information systems security program. The NRC provides the required quarterly reports to Office of Management and Budget.

During FY 2004, the NRC maintained the effectiveness of the information security program for properly handling, distributing, accounting for, and providing licensee access to classified and sensitive information. The agency completed significant enhancements to our secure communications capabilities. In addition, the NRC made significant enhancements to response facilities at headquarters and in the regions, including upgrades to an alternative continuity of operations site and to the display and data subsystems in the headquarters Operations Center.

Government Paperwork Elimination Act (GPEA)

Office of Management and Budget issued "E-Authentication Guidance for Federal Agencies," which updated earlier guidance under the Government Paperwork Elimination Act to ensure that online government services are secure and protect privacy. This updated guidance directed agencies to conduct electronic authentication risk assessments and categorize all existing transactions and systems that require user authentication into four "identity assurance levels" by September 15, 2004. The NRC awarded a contract to complete these assessments for all electronic transactions in accordance with guidance promulgated by the National Institute of Standards and Technology.

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Citizen One-Stop Access to the NRC

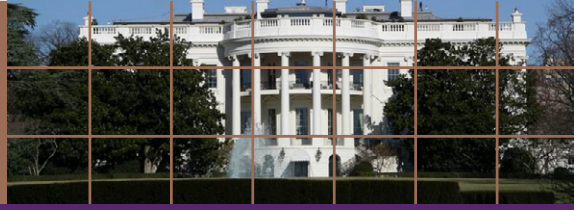
The most important enhancement to the NRC's public Web site in FY 2004 was the addition of a new content area entitled "Hearing Opportunities and License Applications," which provides current information concerning the agency's receipt of major applications or notices of intent to file major applications, as well as current opportunities to request hearings and petition to intervene for major licensing and regulatory actions. A second major enhancement was the addition of "For the Record," which is a new document collection established to publish the NRC's responses to information concerning controversial issues or to significant media reports that could be misleading. The NRC will also use this document collection to respond more efficiently to large write-in campaigns. The NRC added an additional document collection, entitled "Commission Policy Statements," which includes all statements dating back to 1965. In addition, the NRC added significant information concerning "Emergency Preparedness," which became a "Key Topic" on the NRC's home page. Key Topics are used to feature subjects with high public interest.

Electronic Information Exchange — Minimizing the Burden on Business

The NRC maintains an electronic information exchange program, which provides for the transmission of digitally signed electronic documents to the NRC over the Internet. Information received in this manner can then be electronically disseminated and loaded directly into the agency's information systems. Electronic information exchange plays a major role in enabling the NRC to meet the Government Paperwork Elimination Act requirement to allow the public the option of transacting business with the agency electronically.

The NRC continues to utilize the Electronic Hearing Docket, which allows electronic filings through electronic information exchange. The Electronic Hearing Docket is the NRC's official hearing docket for the Department of Energy's anticipated application for a license to construct a high-level waste repository at Yucca Mountain, Nevada. The Electronic Hearing Docket meets the requirements of Title 10, Section 2.1.1013, of the *Code of Federal Regulations* (10 CFR 2.1.1013), as they relate to receiving electronic filings from parties to the high-level waste proceedings.

The NRC provides shared document discovery and facilitates electronic motions practice for the adjudicatory hearing concerning the Department of Energy's anticipated license application for a high-level waste repository at Yucca Mountain using the Licensing Support Network. The Licensing Support Network is intended to benefit the repository licensing proceedings by making



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all parties' relevant documents publicly accessible before docketing, ultimately providing the parties significant information regarding the proposed repository and enables them to provide information to the electronic and publicly accessible docket through a fully electronic filing process. The NRC and the Nevada Counties of White Pine and Lincoln have begun to make their relevant materials available through this system.

Productivity Improvements

Beginning in FY 2004, the NRC established an output measure to monitor technical assessments of new information technologies in order to demonstrate productivity improvements in business processes across the agency.

The NRC completed the first phase and is well into the second phase of a major redesign of the NRC's internal Web site. This project is contributing significantly to improving the efficiency and effectiveness with which the NRC staff can access the information they need to do their jobs, obtain the services they need, and develop their knowledge and skills. By improving the dissemination of announcements and news, the internal Web site is also improving communications with the agency.

IMPROVED FINANCIAL PERFORMANCE

Financial Management Systems

The NRC's financial systems strategy is to improve business processes, systems performance, and access to information while reducing life-cycle costs by relying on commercially available software and cross-service providers wherever possible. The NRC's core accounting, payroll, and human resources systems are cross-serviced outside the agency. The remaining internally maintained and managed financial systems are periodically reviewed for opportunities to improve performance, interface with other systems, and/or be cross-serviced. Our current systems satisfy operational and reporting requirements and provide timely, accurate, and useful information to agency managers. The NRC's systems are in substantial compliance with Federal laws and regulations, except for the Fee Billing System.

In support of the E-Gov initiative, the NRC successfully transferred the payroll and human resources systems from internally maintained and managed systems to the Federal Payroll Processing System, which is provided through a cross-service arrangement with the National Business Center of the Department of the Interior. The NRC initiated a related project to evaluate a long-term solution for reporting time and labor data.

PROGRAM PERFORMANCE

An NRC initiative improved the operational efficiency of the agency's cost accounting system by significantly reducing processing time. Specifically, the cost accounting system provides agency managers periodic reports that reflect cost information at various activity levels used in preparing the statement of net costs for the agency's annual financial statements.

The NRC initiated a two-phased project to consolidate, improve, modernize, and migrate the agency's license fee bill generator system to a single, contemporary information technology environment. Phase One, which consists of a requirements analysis, will be completed in FY 2005. Phase Two, which is scheduled to begin late in FY 2005, will involve implementing the recommendations that evolve from Phase One.

Accurate and Timely Financial Information

The NRC received an unqualified opinion on the FY 2004 financial statements, and the FY 2003 Performance and Accountability Report earned the agency a Certificate of Excellence in Accountability Reporting from the Association of Government Accountants.

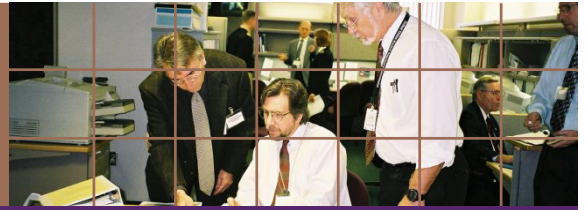
Integrated Financial and Performance Management Systems for Day-to-Day Operations

The NRC has achieved a high level of financial systems integration, which supports the agency's day-to-day operations. Toward that end, core accounting is interfaced with the cost accounting, human resources management, and fee billing systems. The agency also provides electronic access to daily financial transaction data and periodic summary reports for management use. Senior managers receive monthly budget execution reports as well as agency standard cost ratios and performance data.

Annual Financial Statements and Internal Controls

The NRC received an unqualified audit opinion on the agency's financial statements in FY 2004. The NRC will continue to pursue actions that will result in the issuance of financial statements with unqualified audit opinions and no material internal control weaknesses.

In order to promote a high level of data integrity, the NRC has a robust system of internal controls designed to ensure that financial data are entered in a timely and accurate manner. The system of internal controls requires monthly reconciliation of data and quarterly certification by managers throughout the agency. The agency also developed an internal controls training program, which was provided to more than 200 NRC executives, managers, and financial management staff throughout FY 2003 and FY 2004.



DATA SOURCES AND QUALITY

The NRC has an established program for routinely assessing performance and financial information. Annually, managers are required to provide reasonable assurance that effective controls are in place to ensure the integrity of their program and financial operations. These reasonable assurance assessments are reviewed by an executive agency management group, which in turn provides assurance to the Chairman of the Commission. This is the basis for the Chairman's assurance statement contained in the agency's annual Performance and Accountability Report.

DATA SOURCES AND QUALITY

The NRC's data collection and analysis methods are largely driven by the regulatory mandate that Congress entrusted to the agency. Specifically, the NRC's mission is to regulate the Nation's civilian use of byproduct, source, and special nuclear materials to ensure adequate protection of public health and safety, protect the environment, and promote the common defense and security. In undertaking this mission, the NRC oversees nuclear power plants, nonpower reactors, nuclear fuel facilities, transportation and disposal of nuclear waste, and the industrial and medical uses of nuclear materials. Section 208 of the Energy Reorganization Act of 1974, as amended, requires the NRC to inform Congress of incidents or events that the Commission determines to be significant from the standpoint of public health and safety. The NRC developed the abnormal occurrence criteria to comply with the legislative intent of the Act to determine which events should be considered "significant." Based on those criteria, the NRC prepares an annual "Report to Congress on Abnormal Occurrences" (NUREG-0090), which is available on the agency's public Web site at www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr0090/v25.

One important characteristic of this report is that the data presented normally originate from external sources such as Agreement States and NRC licensees. The NRC believes that these data are credible because: (1) agency regulations require Agreement States, licensees, and other external sources to report the necessary information; (2) the NRC maintains an aggressive inspection program that, among other activities, includes auditing licensee programs and evaluating Agreement State programs to ensure that they are reporting the necessary information as required by the agency's regulations; and (3) the agency has established procedures for inspecting and evaluating licensees. The NRC employs multiple database systems to support this process, including the Licensee Event Report Search System, the Accident Sequence Precursor Database, the Nuclear Materials Events Database, and the Radiation Exposure Information Report System. In addition, all reports submitted by Agreement States and NRC licensees are available to the public through the NRC's Agencywide Documents Access and Management System, which is accessible through the agency's Public Web site.

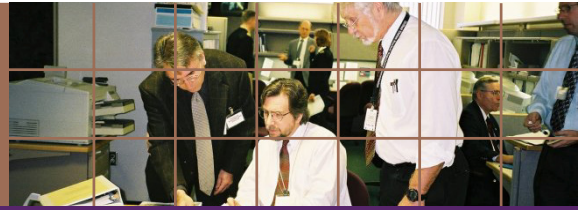
PROGRAM PERFORMANCE

The NRC also has established procedures for the systematic review and evaluation of events reported by NRC and Agreement State licensees. The objective of the review is to identify events that are significant from the standpoint of public health and safety based on criteria that include specific thresholds. The NRC uses a number of sources to determine the reliability and technical accuracy of event information reported to the agency. Such sources include periodic inspections of licensees and reviews of Agreement States. In addition, daily interaction and exchange of event information occurs between the NRC's headquarters and regional offices, and periodic conference calls are placed between headquarters, the regional offices, and Agreement States to discuss event information. Events identified as meeting the abnormal occurrence criteria are validated and verified by all applicable headquarters program offices, regional offices, and agency management before being reported to Congress.

DATA SECURITY

Data security is ensured by the agency's automated information security program, which provides administrative, technical, and physical security measures to protect the agency's information, automated information systems, and information technology infrastructure. Specifically, these measures include the policies, processes, and technical mechanisms used to protect classified information, unclassified safeguards information, and sensitive unclassified information that is processed, stored, or produced on the agency's automated information systems. Data security for information maintained outside the NRC's infrastructure is provided by the hosting contractor or organization.

For major systems, the NRC ensures compliance with agency standards through independent reviews conducted under the Federal Information Security Management Act. The NRC's Office of the Inspector General completed its independent assessment of the agency's implementation of the Act on September 11, 2003. Through that assessment, the Office of the Inspector General found that the NRC has increased the overall level of security for its information systems by successfully completing all required system security documentation as well as all requirements of the Act concerning the security certification and accreditation of all NRC information systems.



DATA SOURCES AND QUALITY

IMPROVEMENTS IN PERFORMANCE DATA

The NRC analyzed the data verification procedures for all of the agency's performance measures during FY 2004. This analysis consisted of an evaluation of all data collection, analysis, and reporting procedures for completeness, accuracy, consistency, and timeliness. The analysis also included an evaluation of NRC management controls, which ensure that the reported data are valid and reliable. As a result, the NRC believes that its performance data are both valid and reliable.

A more complete discussion concerning the validation and verification of the NRC's performance measures and metrics is provided in the agency's Performance Budget for Fiscal Year 2005 (NUREG-1100, Vol. 20), which the Commission submitted to Congress in February 2004. The Performance Budget is also available on the NRC's public Web site at www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr1100/. Appendix IV to the NRC's Performance Plan provides an extensive explanation of the NRC's data verification and validation procedures for each performance measure.

The NRC also makes performance data accessible to citizens through our the public Web site. For example, a citizen who wanted to verify and/or know more about licensee event reports, which provide the raw data for most of our performance measures, could simply retrieve any or all of those reports through the NRC's Agencywide Documents Access and Management System (ADAMS), which is accessible through our public Web site at www.nrc.gov/reading-rm/adams.html, by searching for "licensee event report."

PROGRAM PERFORMANCE



CHAPTER 3: AUDITORS' REPORTS AND FINANCIAL STATEMENTS

MESSAGE FROM THE CHIEF FINANCIAL OFFICER

I am pleased to present the Nuclear Regulatory Commission's financial statements for FY 2004. Our independent auditor has rendered an unqualified opinion on our FY 2004 financial statements, attesting to the fact that the Nuclear Regulatory Commission's financial statements are fairly presented. We restated our FY 2003 financial statements to reflect approximately \$3 million underbilling in fees to licensees and \$777 thousand in capital leases not previously recorded. The auditor found the restated FY 2003 statements to be fairly presented, except for adjustments, if any, due to the lack of evidence supporting the completeness of accounts receivable and revenue.



As of September 30, 2004, the financial condition of the Nuclear Regulatory Commission is sound with respect to having sufficient funds to meet its mission and having sufficient internal controls in place to ensure its budget authority is not exceeded. We successfully collected \$545.3 million in fees paid by licensees, or approximately 100 percent of the agency's budget that is subject to fee recovery. Our year-end delinquent debt was only \$0.9 million, significantly less than our goal of one-half of one percent of the fees collected. Payments to commercial vendors were made on time 94 percent of the time, and 99 percent of our payments were made electronically. Improper payments were limited to less than \$150,000, less than one-half of one percent of payments made.

Through the efforts and teamwork of program, financial management, and audit staff, we continue to be successful in achieving our goals and ensuring that our operations provide timely and reliable information that is used to promote results, accountability, and efficiency. For FY 2004, corrective actions were completed on three reportable conditions and closed by the auditors, quarterly financial statements were issued 15 days after the end of the quarter, and our FY 2004 *Performance and Accountability Report* is being published by November 15, 2004. In addition, the agency examined the adequacy of its efforts to protect against waste, fraud, and mismanagement and the adequacy of its financial systems. Our assessment revealed that we need to strengthen our Fee Billing System. We will develop and implement a remediation plan to correct the deficiency in FY 2005.

AUDITORS' REPORTS AND FINANCIAL STATEMENTS

The Nuclear Regulatory Commission is committed to effective and efficient management of agency resources and continued pursuit of the President's Management Agenda. Our goals and strategies for improving financial management are centered on maintaining an unqualified audit opinion, eliminating the material internal control weakness and substantial non-compliance, meeting new requirements, and implementing E-Government initiatives. We are also addressing reportable conditions identified by the auditor in their review of the financial statements.

I anticipate another productive year in 2005 and continuation of the same high level of quality financial services that resulted in our past successes. While we make progress, we are mindful of our support role in achieving an unqualified audit opinion on the Financial Report of the United States Government.



Jesse L. Funches
November 15, 2004



AUDITORS' REPORTS



United States
Nuclear Regulatory Commission
Washington, D.C. 20555-0001

OFFICE OF THE
INSPECTOR GENERAL

November 12, 2004

MEMORANDUM TO: Chairman Diaz

FROM: Hubert T. Bell
Inspector General

SUBJECT: RESULTS OF THE AUDIT OF THE U.S. NUCLEAR
REGULATORY COMMISSION'S FINANCIAL STATEMENTS
FOR FISCAL YEARS 2004 AND 2003 (OIG-05-A-02)

This memorandum transmits the R. Navarro & Associates, Inc., Independent Auditors' Report on the audit of the Nuclear Regulatory Commission's (NRC) financial statements for the fiscal years ended September 30, 2004, and 2003. The Chief Financial Officers Act of 1990, as amended, (CFO Act) requires the Inspector General (IG) or an independent external auditor, as determined by the IG, to annually audit NRC's financial statements in accordance with applicable standards. R. Navarro & Associates' report includes: (1) an opinion on the financial statements, (2) a report on the effectiveness of internal controls, and (3) a report on compliance with laws and regulations.

Objective of a Financial Statement Audit

The objective of a financial statement audit is to determine whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management as well as evaluating the overall financial statement presentation.

R. Navarro & Associates' examination was made in accordance with generally accepted auditing standards, *Government Auditing Standards* issued by the Comptroller General of the United States, and Office of Management and Budget (OMB) Bulletin No. 01-02, *Audit Requirements for Federal Financial Statements*. The audit included obtaining an understanding of the internal controls over financial reporting and testing and evaluating the design and operating effectiveness of the internal controls. Because of inherent limitations in any internal control, there is a risk that

AUDITORS' REPORTS AND FINANCIAL STATEMENTS

errors or fraud may occur and not be detected. Also, projections of any evaluation of internal control over financial reporting to future periods are subject to the risk that the internal control may become inadequate because of changes in conditions, or that the degree of compliance with policies or procedures may deteriorate. The risk of fraud is inherent to many of NRC's programs and operations.

Results of Audit

The results are as follows:

Financial Statements

- FY 2004 - Unqualified opinion
- FY 2003 - Opinion changed from unqualified to qualified due to the lack of evidential matter to support the completeness of accounts receivable and revenue

FY 2004 Internal Controls

- Material Weakness:
 - Fee Billing System
- Reportable Conditions:
 - Monitoring of Accounting for Internal Use Software
 - User Organization Compensating Controls

FY 2004 Compliance with Laws and Regulations

- Reportable Conditions:
 - Part 170 Hourly Rates
 - Fee Recovery from Licensees
 - Fee Billing System - Federal Financial Management Improvement Act of 1996- Substantial Noncompliance



AUDITORS' REPORTS

OIG Evaluation of R. Navarro and Associates, Inc. Performance

To fulfill our responsibilities under the CFO Act and related legislation for ensuring the quality of the audit work performed, we monitored R. Navarro & Associates' audit of NRC's Fys 2004 and 2003 financial statements by:

- Reviewing their approach and planning of the audit;
- Evaluating the qualifications and independence of its auditors;
- Monitoring the progress of the audit at key points;
- Examining the workpapers related to planning and performing the audit and assessing NRC's internal control;
- Reviewing R. Navarro & Associates' audit report to ensure compliance with *Government Auditing Standards* and OMB Bulletin No. 01-02;
- Coordinating the issuance of the audit report; and
- Performing other procedures that we deemed necessary.

R. Navarro & Associates is responsible for the attached auditors' report, dated November 10, 2004, and the conclusions expressed therein. The OIG is responsible for technical and administrative oversight regarding the firm's performance under the terms of the contract. Our review, as differentiated from an audit in conformance with *Government Auditing Standards*, was not intended to enable us to express, and accordingly we do not express an opinion on NRC's financial statements, the effectiveness of its internal control over financial reporting, or NRC's compliance with laws and regulations. However, our monitoring review, as described above, disclosed no instances where R. Navarro & Associates did not comply with applicable auditing standards.

Performance Reporting

As required by OMB Bulletin No. 01-02, with respect to internal control related to performance measures determined by management to be key and reported in the Management's Discussion and Analysis, we obtained an understanding of the design of significant internal controls relating to the existence and completeness assertions. Our procedures were not designed to provide assurance on internal control over performance measures and, accordingly, we do not provide an opinion thereon.

AUDITORS' REPORTS AND FINANCIAL STATEMENTS

Meeting with the Chief Financial Officer

At the exit conference on November 10, 2004, representatives of the Office of the Chief Financial Officer, OIG, and R. Navarro & Associates discussed the issues in the report.

The independent auditors' management letter providing observations on ways to strengthen internal controls and operating efficiency will be sent separately.

We appreciate NRC staff's cooperation and continued interest in improving financial management within NRC.

Attachment: As stated

cc: Commissioner McGaffigan
Commissioner Merrifield



AUDITORS' REPORTS



2831 Camino Del Rio South, Suite 306
San Diego, California 92108
(619) 298-8193

Chairman Nils J. Diaz
U.S. Nuclear Regulatory Commission
Washington, DC

In our audit of the U.S. Nuclear Regulatory Commission (NRC), we found:

- The balance sheet of NRC as of September 30, 2004, and the related statements of net cost, statement of changes in net position, statement of budgetary resources, and statement of financing for the fiscal year then ended are presented fairly, in all material respects, in conformity with accounting principles generally accepted in the United States of America;
- The balance sheet of NRC as of September 30, 2003, as restated, and the related restated statement of net cost, statement of changes in net position, statement of budgetary resources, and statement of financing for the fiscal year then ended are presented fairly, in all material respects, in conformity with accounting principles generally accepted in the United States of America, except for adjustments, if any, due to the lack of evidence to support the completeness of accounts receivable and revenue;
- Except for the material weakness over the Fee Billing System, the effectiveness of internal control over financial reporting was fairly stated as of September 30, 2004, in compliance with the internal control objectives in the Office of Management and Budget (OMB) Bulletin No. 01-02, *Audit Requirements for Federal Financial Statements*. The Bulletin requires that transactions be properly recorded, processed, and summarized to permit the preparation of the financial statements in accordance with accounting principles generally accepted in the United States of America and that assets be safeguarded against loss from unauthorized acquisition, use or disposal; and
- The NRC continues to be non-compliant with the provisions of OMB Circular A-25, *User Charges*, for Part 170 fees and a Fee Recovery condition. Additionally, we identified a substantial non-compliance related to the Fee Billing System.

The following sections outline each of these conclusions in more detail.

AUDITORS' REPORTS AND FINANCIAL STATEMENTS

INDEPENDENT AUDITORS' REPORT ON THE FINANCIAL STATEMENTS

We have audited the accompanying balance sheets of NRC as of September 30, 2004, and 2003, and the related statements of net cost, statements of changes in net position, statements of budgetary resources, and statements of financing for the fiscal years then ended. These financial statements are the responsibility of NRC's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America, the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States, and OMB Bulletin No. 01-02. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

MATTERS OF EMPHASIS

Classification of Costs

OMB Bulletin No. 01-09, *Form and Content of Agency Financial Statements*, provides guidance to federal agencies for presenting program costs classified by intragovernmental and public components. The basis for classification relies on the concept of who received the benefits of the costs incurred (e.g. private sector licensees versus federal licensees) rather than who was paid. However, following the advice of OMB, NRC classified the costs on the Statement of Net Cost using an underlying concept of who was paid. Furthermore, OMB Bulletin No. 01-09 requires that the Statement of Net Cost be presented using full program costs by output. The agency presents its costs aggregated by mission-related strategic arenas, which are comprised of NRC's programs.

U.S. Department of Energy Expenses

NRC's principal statements include reimbursable expenses of the U.S. Department of Energy (DOE) National Laboratories. NRC's Statements of Net Cost include approximately \$77.2 and \$73.1 million, respectively for the years ended September 30, 2004, and 2003, of



AUDITORS' REPORTS

reimbursed expenses. Our audits included testing these expenses for compliance with laws and regulations within NRC. The work placed with DOE is under the auspices of a Memorandum of Understanding between NRC and DOE. The examination of DOE National Laboratories for compliance with laws and regulations is DOE's responsibility. This responsibility was further clarified by a memorandum of the Government Accountability Office's (GAO) Assistant General Counsel, dated March 6, 1995, where he opined that "...DOE's inability to assure that its contractors' costs [National Laboratories] are legal and proper...does not compel a conclusion that NRC has failed to comply with laws and regulations." DOE also has the cognizant responsibility to assure audit resolution and should provide the results of its audits to NRC.

FY 2003 Financial Statements Restated

The financial statements for FY 2003 were restated to reflect approximately \$3 million in fees to licensees due to deficiencies in the agency's fee billing system. Additionally, the balance sheet includes \$777 thousand under capital leases acquired by the agency in FY 2002 and not previously recorded, and a reclassification of unfilled customer orders of \$4.7 million. Note 13 to the financial statements provides a detailed description of the restatement.

In our report dated November 20, 2003, we expressed an opinion that the FY 2003 financial statements presented fairly the financial position, net cost, changes in net position, budgetary resources, and reconciliation of net costs to budgetary resources for the fiscal year ended September 30, 2003. The NRC made a software change during FY 2003 that precluded the preparation of complete billings to licensees for reactor and fuel fees. The NRC identified unbilled FY 2003 fees of approximately \$3 million. The agency billed these fees and subsequently restated the FY 2003 financial statements. However, the agency could not provide sufficient evidence to support the completeness of the accounts receivable balance or revenue. The Fee Billing System used by the agency does not provide for the production of period reports, thus the fee reports produced of FY 2003 transactions would have to be rolled back. The evidence to support such rollback is not readily available. Therefore, we are uncertain of the adjustments, if any, that would have been made to accounts receivable and revenue had evidence been available for audit. Accordingly, our present opinion on the FY 2003 financial statements as presented herein, is different from that expressed in our previous report.

In our opinion, except for the effects on the FY 2003 financial statements of such adjustments, if any, as might have been determined to be necessary had we been able to examine evidence regarding the completeness of the restated accounts receivable and revenue amounts as described

AUDITORS' REPORTS AND FINANCIAL STATEMENTS

in the preceding paragraph, the financial statements referred to above and included in NRC's performance and accountability report present fairly, in all material respects, the financial position at September 30, 2004, and 2003, and its net cost, changes in net position, budgetary resources, and reconciliations of net cost to budgetary resources for the fiscal years then ended in conformity with accounting principles generally accepted in the United States of America.

REPORT ON THE EFFECTIVENESS OF INTERNAL CONTROL OVER FINANCIAL REPORTING

We have examined the effectiveness of NRC's internal control over financial reporting, as of September 30, 2004, based on the criteria in OMB Bulletin No. 01-02. The Bulletin requires management to establish internal accounting and administrative controls to provide reasonable assurance that transactions are properly recorded, processed, and summarized to permit the preparation of the financial statements in accordance with accounting principles generally accepted in the United States of America and that assets be safeguarded against loss from unauthorized acquisition, use or disposal. NRC's management is responsible for maintaining effective internal control over financial reporting. Our responsibility is to express an opinion on the effectiveness of internal control based on our examination.

Our examination was conducted in accordance with the attestation standards established by the American Institute of Certified Public Accountants (AICPA); the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and OMB Bulletin No. 01-02. Accordingly, we obtained an understanding of the internal control over financial reporting, tested and evaluated the design and operating effectiveness of internal control, and performed such other procedures as we considered necessary in the circumstances. We believe that our examination provides a reasonable basis for our opinion.

Because of inherent limitations in any internal control, misstatements due to error or fraud may occur and not be detected. Also, projections of any evaluation of internal control over financial reporting to future periods are subject to the risk that the internal control may become inadequate because of changes in conditions, or that the degree of compliance with policies or procedures may deteriorate.

We identified significant deficiencies in the Fee Billing System. The system in place does not meet the requirements of sound internal control over financial reporting as provided in OMB Bulletin No. 01-02, nor is the system's design compliant with the requirements of the Joint Financial Management Improvement Program (JFMIP) for Revenue Systems. We believe such a condition represents a material weakness. A material weakness is a reportable condition that



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precludes the NRC's internal control from providing reasonable assurance that material misstatements in the financial statements will be prevented and detected on a timely basis.

In our opinion, except for the effect of the material weakness described in the preceding paragraph, NRC has maintained, in all material respects, effective internal control over financial reporting as of September 30, 2004, based on the internal control objectives listed in OMB Bulletin No. 01-02.

Additionally, we noted certain matters involving the internal control and its operation that we consider to be reportable conditions under standards established by the AICPA and OMB Bulletin No. 01-02. A reportable condition is a matter coming to our attention relating to significant deficiencies in the design or operation of the internal control that, in our judgment, could adversely affect the agency's ability to meet the internal control objectives described above. We identified three reportable conditions; NRC needs to: (1) improve the fee billing system, (2) improve monitoring of accounting for internal use software, and (3) implement compensating controls for applications used through a service provider. The Fee Billing System condition is considered a material weakness.

A material weakness, as defined by the AICPA and OMB Bulletin No. 01-02, is a reportable condition in which the design or operation of one or more of the internal control components does not reduce to a relatively low level the risk that misstatements caused by error or fraud in amounts that would be material in relation to the principal financial statements being audited may occur and not be detected within a timely period by employees in the normal course of performing their assigned functions. We believe that the reportable conditions that follow, except for the Fee Billing System, are not material weaknesses as defined by the AICPA and OMB Bulletin No. 01-02.

FEE BILLING SYSTEM

The Omnibus Budget Reconciliation Act (OBRA-90), Public Law 101-508, as amended, requires that NRC recover, through fee billing, a percentage of its budget authority in each fiscal year, less amounts appropriated from the Nuclear Waste Fund (NWF). In FY 2004 the recovery percentage was 92 percent. In order to meet this requirement, the NRC assesses two types of fees to recover its budget authority. Annual fees are assessed under 10 CFR Part 171 for nuclear facilities and materials licensees, commonly known as Part 171 fees. Other fee types include license, inspection and other services, established in 10 CFR Part 170 under the authority of the Independent Offices Appropriation Act (IOAA). The Part 170 fees are assessed to recover the NRC's costs of providing individually identifiable services to specific applicants and licensees.

AUDITORS' REPORTS AND FINANCIAL STATEMENTS

In order to comply with the requirements of OBRA-90 and IOAA the agency relies on a series of applications that comprise the Fee Billing System. The application configurations vary in order to operationally adapt each system to fit the fee billing type. In FY 2003 the agency implemented software changes to the Fee Billing System that resulted in the understatement of invoices to 54 licensees. While analyzing the universe of FY 2004 fee invoices for sampling purposes, we discovered that 74 FY 2003 invoices were re-issued to recover approximately \$2.5 million in previously unbilled reactor inspection fees. Once this issue was identified additional procedures disclosed approximately \$500 thousand in additional unbilled invoices related to FY 2003. The FY 2003 financial statements were restated to reflect the understatement of revenue and accounts receivable. This condition is considered a material weakness and Federal Financial Management Improvement Act (FFMIA) substantial non-compliance.

The condition resulted from several deficiencies: (1) inadequate acceptance testing of software modifications, (2) intensive manual processes, and (3) the lack of comprehensive quality assurance procedures over the billing process.

Inadequate Acceptance Testing

In February 2003, the agency placed into production a major software release for FEES, a mainframe system hosted by a service provider. The main purpose of the software release was to implement a new user-friendly interface.

The release also automated data reporting for Nuclear Security and Incident Response (NSIR) and Research (RES). Previously, hours incurred on facility licensing actions and topical reports by personnel in these Headquarters offices were manually input. After the software release was placed in production, data from Headquarters offices continued to be captured and retained in FEES but the interface between FEES and FACFEES did not transfer data to FACFEES (a PC based system running on the NRC LAN and used to generate facility inspection billings for data maintained in FEES).

The acceptance testing performed failed to discover deficiencies because the interface was not tested to ensure that all inspection data from Headquarters and regional offices was appropriately transferred to FACFEES. This failure illustrates the need for more rigorous testing of interfaces before major releases of software are placed in production.

The Standards for Internal Control in the Federal Government, issued by the Government Accountability Office, prescribe that control activities should be effective and efficient in



AUDITORS' REPORTS

accomplishing the agency's control objectives. Control activities for IT systems should provide the structure for safely developing new systems and modifying existing systems, including reviews, testing and approvals of development and modification activities before placing systems into operation.

Intensive Manual Processes

The agency relies on a small team to prepare, review and issue billings on a monthly and quarterly basis. The License Fee Team (LFT) employs various manual processes to compensate for the lack of flexibility in the legacy fee billing system. The system does not have the ability to give the agency drill down capacity to review billing questions. Instead LFT personnel must set aside other priorities to perform manual research of a problem. The system does not provide automated audit trails from the initial source of the transaction (i.e. inspection hours) to the development of an invoice. LFT personnel undertake a process where they have to recreate what happened to the best of their personal cuff records and knowledge. This is of particular concern since the fee billing system is not date sensitive; therefore, reports produced are as of the print date rather than the transaction date.

The lack of system functionality coupled with the age of the system and its reliance on manual intervention resulted in an FFMIA substantial non-compliance with the JFMIP Revenue System Requirements. The agency has begun the planning process for redesigning or replacing the billing system with the tools and technology of the present.

Lack of Comprehensive Quality Assurance Procedures

In mid to late FY 2004, the OCFO developed informal procedures to detect potential under billings. However, these procedures are not effective because they do not provide for global reconciliations of FEES reports to billings generated by the PC based billing system. Global reconciliations of data generated by different sources are necessary to identify differences that may prompt action preventing the preparation and issuance of erroneous licensee invoices. Additionally, some reports produced by the fee system do not contain control totals to enable comparisons of invoices to raw data sources, thus complicating the viability of a quality assurance process.

The *Standards for Internal Control in the Federal Government*, state "Internal control should generally be designed to assure that ongoing monitoring occurs in the course of normal operations. It is performed continually and is ingrained in the agency's supervisory activities, comparisons, reconciliations, and other actions people take in performing their duties."

AUDITORS' REPORTS AND FINANCIAL STATEMENTS

Recommendation

1. The CFO should ensure that the functionality of interfaces is rigorously tested before placing any software changes into production. Acceptance testing scripts should be designed more broadly to ensure greater scrutiny of the change being implemented. Independent validations of software changes and the related acceptance testing should be performed or reviewed and approved by persons other than those requesting the software modifications.
2. The CFO should develop and implement a remediation plan to enhance the reliability of the current billing system. Additionally, as the CFO considers the system redesign they should identify steps to address systemic issues with the current fee billing system.
3. The CFO should ensure that documented, complete, and reliable quality assurance procedures are prepared for the billing process. At a minimum, those procedures should provide for a documented global reconciliation, at each billing cycle, of hours and fees reflected in FEES to the invoices generated by the PC based fee billing systems.

MONITORING OF ACCOUNTING FOR INTERNAL USE SOFTWARE

As reported in FY 2002, the Federal Accounting Standards Advisory Board issued Statement of Federal Financial Accounting Standards (SFFAS) No. 10, *Accounting for Internal Use Software*, effective October 1, 2000. SFFAS No. 10 defines three software life-cycle phases: planning, development and operations. Paragraph 16 requires, "For internally developed software, capitalized cost should include the full cost (direct and indirect cost) incurred during the development phase." The Statement defines full cost to include salaries of programmers, project managers, administrative personnel, and associated employee benefits and outside consultants' fees.

Since FY 2002, we have identified the lack of proactive management of the costs incurred for internal use software as a reportable condition. OCFO's management control structure is designed to rely heavily on project managers to inform OCFO of time and costs expended in the software development phase. OCFO has not fully addressed execution of existing monitoring procedures to ensure the completeness or reasonableness of the project manager's information.

Our review of the agency's practices for accounting for internal use software projects, continues to identify the following inconsistencies:



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- Contractor costs incurred on projects were not being routinely captured and capitalized;
- Project managers were not coding their time appropriately during the development phase of their projects;
- Project managers did not receive training and thus were not fully aware that time and costs should be captured and reported to OCFO; and
- Labor certifications were not being completed, signed and/or were being completed late.

For example, beginning in August 2003 the NRC spent approximately \$1.2 million in modifying the Operations Center Management Information System. The OCFO did not become aware of the project until a survey was performed by the Office of the Chief Information Officer in July 2004. The project costs were invested in equipment and software development. Costs subject to capitalization thresholds were approximately \$642 thousand. These exceptions continue to indicate that the agency does not have a routine, timely, and disciplined process in place to monitor the adequacy of accounting information necessary to capitalize internal use software projects.

Recommendation

4. The CFO should continue to reassess the internal use software procedures and related accounting activities being undertaken by agency personnel to ensure their completeness and propriety. In addition to proactive monitoring, the CFO should design and provide training to project managers and their supervisors in order to provide awareness and instill discipline to project managers in their role of providing reliable information to the OCFO.

USER ORGANIZATION COMPENSATING CONTROLS

In response to the President's Management Agenda for E-Government initiatives, NRC migrated to the Federal Personnel and Payroll System (FPPS) operated by the National Business Center (NBC), Department of Interior, as a service bureau. The migration occurred in November 2003.

NBC designed the controls over FPPS under the assumption that client organizations would implement effective controls to complement FPPS controls. The FPPS service auditors' report lists the user controls necessary to achieve the control objectives specified by NBC. In addition to several other controls, NBC recommends that user organizations should implement controls to ensure that payroll costs are reconciled for accuracy.

AUDITORS' REPORTS AND FINANCIAL STATEMENTS

NRC's procedures are not designed to detect misstatements made during payroll processing. Presently, the following reconciliation process is followed:

- Payroll data is downloaded from FPPS into Federal Financial System, the agency's general ledger system.
- Imported data is reconciled to the FPPS cost reports for each payroll period.
- Each month, OCFO reconciles FPPS data to information recorded in FFS.
- OCFO compares cost information reported by NBC to the U.S. Treasury on the monthly Statements of Transactions (SF-224) to the payroll costs recorded in FFS.

These reconciliation procedures are designed to provide reasonable assurance that information transferred into the agency's general ledger and that disbursed by the Treasury are reliable. However, there are no compensating controls to validate the reliability of the payroll amounts processed by FPPS. NRC is accepting as correct the information being transferred into the general ledger without independently assessing the information submitted by the service provider.

NRC Management Directive 4.4, Part 1 provides the implementing policy of the Federal Managers' Financial Integrity Act. The directive states that the proper stewardship of Federal resources is a fundamental responsibility of NRC managers and staff. The Integrity Act requires executive agencies to establish controls to provide reasonable assurance that obligations and costs comply with applicable law; assets are safeguarded against waste, loss, unauthorized use or misappropriation; and revenues and expenditures are properly recorded and accountability is maintained.

Recommendation

5. The CFO should develop compensating controls to assist in validating information provided by NBC. At a minimum, the agency should develop an expectation model based on analytical procedures designed to detect misstatements in the biweekly payroll amounts reported by NBC. The CFO should also ensure that the agency is compliant with the list of compensating controls included in the FPPS' service auditors' report.

STATUS OF PRIOR YEAR COMMENTS

In the prior year we included conditions related to managerial cost accounting, information security access controls, contract close-out procedures, internal use software monitoring, and compliance with Part 170 Hourly Rates. Corrective actions implemented during the year closed three conditions. However, the conditions related to monitoring of accounting for internal use software and Part 170 Hourly Rates continued in the current fiscal year.



AUDITORS' REPORTS

REPORT ON COMPLIANCE WITH LAWS AND REGULATIONS

We conducted our audit for the year ended September 30, 2004, in accordance with auditing standards generally accepted in the United States of America, the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, and OMB Bulletin No. 01-02.

NRC management is responsible for complying with laws and regulations applicable to the agency. As part of obtaining reasonable assurance about whether the agency's financial statements are free of material misstatement, we performed tests of its compliance with certain provisions of applicable regulations, noncompliance with which could have a direct and material effect on the determination of financial statement amounts and certain other laws and regulations specified in OMB Bulletin No. 01-02, including the requirements in the FFMIA. We limited our tests of compliance to these provisions and we did not test compliance with all laws and regulations applicable to NRC. The results of our tests of compliance disclosed noncompliances with laws and regulations that are required to be reported under *Government Auditing Standards*, OMB Bulletin No. 01-02 or under FFMIA.

U.S. DEPARTMENT OF ENERGY EXPENSES

NRC's principal statements include reimbursable expenses of the U.S. Department of Energy (DOE) National Laboratories. NRC's Statements of Net Cost include approximately \$77.2 and \$73.1 million, respectively for the years ended September 30, 2004, and 2003, of reimbursed expenses. Our audits included testing these expenses for compliance with laws and regulations within NRC. The work placed with DOE is under the auspices of a Memorandum of Understanding between NRC and DOE. The examination of DOE National Laboratories for compliance with laws and regulations is DOE's responsibility. This responsibility was further clarified by a memorandum of the GAO's Assistant General Counsel, dated March 6, 1995, where he opined that "...DOE's inability to assure that its contractors' costs [National Laboratories] are legal and proper...does not compel a conclusion that NRC has failed to comply with laws and regulations." DOE also has the cognizant responsibility to assure audit resolution and should provide the results of its audits to NRC.

The objective of our audit of the financial statements was not to provide an opinion on overall compliance with such provisions of laws and regulations and, accordingly, we do not express such an opinion.

AUDITORS' REPORTS AND FINANCIAL STATEMENTS

In the current year we identified a continuing noncompliance, which was initially reported in 1998, and two additional reportable conditions. The following discussion addresses the noncompliances:

PART 170 HOURLY RATES

As previously reported from FY 1998 through FY 2003, the Omnibus Budget Reconciliation Act (OBRA) of 1990 requires the NRC to recover approximately 100 percent of its budget authority by assessing fees. (The recovery percentage has been reduced in recent years by 2 percent each year. During FY 2004, the recovery percentage was 92 percent.) Accordingly, NRC assesses two types of fees to its licensees and applicants. One type, specified in 10 CFR Part 171, consists of annual fees assessed to power reactors, materials and other licensees. The other type, specified in 10 CFR Part 170 and authorized by the Independent Offices Appropriation Act of 1952, is assessed for specific licensing actions, inspections and other services provided to NRC's licensees and applicants.

Each year, the OCFO computes the hourly rates used to charge for Part 170 services. Consistent with OBRA of 1990, the rates are based on budgetary data and are used to price individually identifiable Part 170 services. NRC developed the FY 1998 and subsequent years' rates using the budgetary basis without validating the fee amounts to the full cost of providing Part 170 services.

The CFO has been awaiting the implementation of cost accounting to fully address this condition. During the final quarter of FY 2003, the agency achieved compliance with SFFAS No. 4 regarding cost accounting. During FY 2004 the agency started an assessment to address this noncompliance. The assessment strategy is being performed on an incremental basis and as of the end of our fieldwork, the preliminary pilot component of the assessment is underway.

Recommendation

6. The CFO should continue to pursue the assessment strategy that is underway and ensure that a communication process is developed to assist OCFO management and to inform the Office of Inspector General of the progress and actions planned to resolve this condition.

FEE RECOVERY FROM LICENSEES

The NRC has a process to assign codes (i.e., billable and non-billable) to contract costs that are fee recoverable. The codes are assigned by project managers in the office that directly manages the effort. During FY 2004, the OCFO determined that contract costs incurred by the Office of



AUDITORS' REPORTS

Nuclear Materials Safety and Safeguards (NMSS) for design, construction, operation and deactivation of the Mixed Oxide (MOX) fuel fabrication facility were not billed directly to the licensee. The agency determined that this error, which dates back to FY 2001, affected contract costs totaling \$2.1 million. Since the costs had not been properly coded the agency's calculations for fuel facilities fees had been understated. This error did not impact the financial statements since the amounts were recovered, albeit incorrectly from all fuel cycle licensees, rather than the specific licensee.

In the FY 2004 Fee Rule issued in April 2004, the agency made a one-time adjustment to the Fuel Facilities fees for the costs associated with the MOX review. The fee rule explained that the amounts had been improperly coded and not factored into the fee calculations for FY 2001 through FY 2003.

10 CFR Part 170 under the authority of the Independent Offices Appropriation Act (IOAA) requires that fees be assessed to recover the NRC's costs of providing individually identifiable services to specific applicants and licensees.

Recommendation

7. The CFO should develop a process to ensure that new initiatives are effectively monitored to make certain that the agency's financial management guidelines are followed at the start of an initiative. Additionally, the CFO should reiterate to program offices the importance of complying with agency policy to prevent delays in the billing process and to prevent recovering costs from an improper licensee community.

FEE BILLING SYSTEM

In our *Report on the Effectiveness of Internal Control Over Financial Reporting*, we identified the Fee Billing System as both a material weakness and an FFMIA substantial non-compliance. Refer to that report for a detailed discussion of the condition.

INTERNAL CONTROL RELATED TO PERFORMANCE MEASURES

With respect to internal controls related to performance measures described in Chapter 2 of the performance and accountability report, the OIG performed those procedures and will address this issue separately. Our procedures were not designed to provide assurance over reported performance measures, and, accordingly, we do not provide an opinion on such information.

AUDITORS' REPORTS AND FINANCIAL STATEMENTS

CONSISTENCY OF OTHER INFORMATION

Our audit was conducted for the purpose of forming an opinion on the financial statements of NRC taken as a whole. The required supplementary information included on pages 140 and 141, and the Management Discussion and Analysis, Chapter 1 of this Performance and Accountability Report, is not a required part of the financial statements but is supplementary information required by OMB Bulletin No. 01-09. We have applied certain limited procedures which consisted principally of inquiries of management regarding the methods of measurement and presentation of the supplementary information. However, we did not audit the information and express no opinion on it.

The other accompanying information included in Chapter 2 and the appendices to the accountability report, are required by OMB Bulletin No. 01-09 and are presented for purposes of additional analysis and are not a required part of the financial statements. Such information has not been subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on it.

Our audit was conducted for the purpose of forming an opinion on the financial statements of NRC taken as a whole. The required supplementary information, Schedule of Intragovernmental Assets and Liabilities and the Schedule of Budgetary Resources, included on pages 140 and 141 of this performance and accountability report, is not a required part of the financial statements but is supplementary information required by OMB Bulletin No. 01-09. This information is also presented for purposes of additional analysis of the financial statements rather than to present the budgetary resources of the NRC programs. This information has been subjected to the auditing procedures applied in the audit of the financial statements and, in our opinion, is fairly stated in all material respects in relation to the financial statements taken as a whole.

This report is intended solely for the information and use of NRC management, the Inspector General, OMB, GAO, and the Congress and is not intended to be and should not be used by anyone other than these specified parties.

November 10, 2004

R. Navano & Associates, Inc.



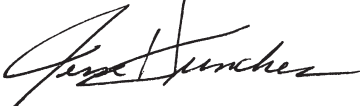
AUDITORS' REPORTS



**United States
Nuclear Regulatory Commission**
Washington, D.C. 20555-0001

November 11, 2004

MEMORANDUM TO: Stephen D. Dingbaum
Assistant Inspector General for Audits

FROM: Jesse L. Funches
Chief Financial Officer 

SUBJECT: AUDIT OF THE FY 2004 FINANCIAL STATEMENTS

I have reviewed the audit report of the agency's FY 2004 Financial Statements, dated November 10, 2004. Our responses to the seven recommendations follow:

Recommendation 1

The CFO should ensure that the functionality of interfaces is rigorously tested before placing any software changes into production. Acceptance testing scripts should be designed more broadly to ensure greater scrutiny of the change being implemented. Independent validations of software changes and the related acceptance testing should be performed or reviewed and approved by persons other than those requesting the software modifications.

Response

Agree. We will ensure any interfaces associated with future software changes are rigorously tested before the change is placed into production.

Recommendation 2

The CFO should develop and implement a remediation plan to enhance the reliability of the current billing system. Additionally, as the CFO considers the system redesign they should identify steps to address systemic issues with the current fee billing system.

CONTACT: Barbara K. Gusack, OCFO/DFM/FSRT
415-6054

AUDITORS' REPORTS AND FINANCIAL STATEMENTS

Response

Agree. A remediation plan will be developed by April 30, 2005, specifying the schedule and actions that will be taken to improve the reliability of the current fee billing system. We will also continue to develop a replacement fee system and will ensure that it addresses issues associated with the current system.

Recommendation 3

The CFO should ensure that documented, complete, and reliable quality assurance procedures be prepared for the billing process. At a minimum those procedures should provide for a documented global reconciliation, at each billing cycle, of hours and fees reflected in FEES to the invoices generated by the PC based fee billing systems.

Response

Agree. By March 31, 2005, the CFO will modify, document, and implement quality assurance procedures for the billing process. These procedures will include a global reconciliation of each billing cycle. We will also implement interim quality assurance actions for the first quarter FY 2005 billing.

Recommendation 4

The CFO should continue to reassess the internal use software procedures and related accounting activities being undertaken by agency personnel to ensure their completeness and propriety. In addition to proactive monitoring, the CFO should design and provide training to project managers and their supervisors in order to provide awareness and instill discipline to project managers in their role of providing reliable information to the OCFO.

Response

Agree. The CFO will reassess current policies and procedures to improve the completeness and propriety of internal use software capitalization information. We will complete the reassessment by April 30, 2005



AUDITORS' REPORTS

Recommendation 5

The CFO should develop compensating controls to assist in validating information provided by NBC. At a minimum, the agency should develop an expectation model based on analytical procedures designed to detect misstatements in the biweekly payroll amounts reported by NBC. The CFO should also ensure that the agency is compliant with the list of compensating controls included in the FPPS' service auditors' report.

Response

Agree. The CFO will review the list of compensating controls listed in the FPPS service auditors' report (SAS-70), and ensure the agency is in full compliance with our user organization role by March 31, 2005. To further ensure the accuracy of payroll payments by NBC, the CFO will modify its current procedures to verify hours paid each pay period. This procedure will be implemented by March 31, 2005. The agency will also evaluate, after gathering further information, the development of an expectation model to help detect misstatements in the biweekly payroll amounts.

Recommendation 6

The CFO should continue to pursue the assessment strategy that is underway and ensure that a communication process is developed to assist OCFO management and to inform the Office of Inspector General of the progress and actions planned to resolve this condition.

Response

Agree.

Recommendation 7

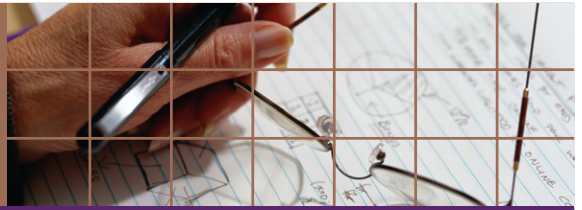
The CFO should develop a process to ensure that new initiatives are effectively monitored to make certain that the agency's financial management guidelines are followed at the start of an initiative. Additionally, the CFO should reiterate to program offices the importance of complying with agency policy to prevent delays in the billing process and to prevent recovering costs from an improper licensee community.

AUDITORS' REPORTS AND FINANCIAL STATEMENTS

Response

Agree. We will develop a process by April 30, 2005, to ensure that the appropriate management and staff are aware of fee-related guidelines and policies. Additionally, by January 31, 2005, the CFO will reiterate to NRC office directors and regional administrators the importance of maintaining compliance with agency fee policy to prevent delays in the billing process and to prevent recovering costs from an improper licensee community.

cc: W. Dean, OEDO
M. Malloy, OEDO



PRINCIPAL STATEMENTS

LIMITATIONS OF THE FINANCIAL STATEMENTS

The principal statements have been prepared to report the financial position and results of operations of the NRC, pursuant to the requirements of the Chief Financial Officers Act of 1990, as amended by the Government Management Reform Act of 1994. These statements have been prepared from the books and records of the NRC in accordance with the formats prescribed by the Office of Management and Budget. However, these statements differ from the financial reports used to monitor and control budgetary resources that are prepared from the same books and records. The principal statements should be read with the realization that they are for a sovereign entity, liabilities not covered by budgetary resources cannot be liquidated without the enactment of an appropriation, and the payment of all liabilities other than for contracts can be abrogated by the sovereign entity. Other limitations are included in the footnotes to the principal statements.

The NRC's FY 2004 financial statements were audited by R. Navarro and Associates, under contract to the NRC's Office of the Inspector General.

AUDITORS' REPORTS AND FINANCIAL STATEMENTS

BALANCE SHEET

(Dollars in Thousands)

As of September 30,	2004	Restated 2003
Assets		
Intragovernmental		
Fund balances with Treasury (Note 2)	\$ 200,277	\$ 193,420
Accounts receivable (Note 3)	3,357	2,667
Other	2,295	2,933
<i>Total intragovernmental</i>	205,929	199,020
Cash and other monetary assets	-	20
Accounts receivable, net (Note 3)	50,648	50,561
Property and equipment, net (Note 4)	26,683	30,205
Other	29	19
Total Assets	\$ 283,289	\$ 279,825
Liabilities		
Intragovernmental		
Accounts payable	\$ 8,564	\$ 7,399
Other (Notes 5 and 6)	61,568	60,082
<i>Total intragovernmental</i>	70,132	67,481
Accounts payable	19,367	19,937
Federal employees benefits (Note 6)	8,114	9,073
Other liabilities (Note 5)	48,317	41,704
Total Liabilities	145,930	138,195
Net Position		
Unexpended appropriations	149,901	149,719
Cumulative results of operations (Note 8)	(12,542)	(8,089)
Total Net Position	137,359	141,630
Total Liabilities and Net Position	\$ 283,289	\$ 279,825

The accompanying notes to the principal statements are an integral part of this statement.



PRINCIPAL STATEMENTS

STATEMENT OF NET COST

(Dollars in Thousands)

For the year ended September 30,	2004	Restated 2003
<i>Nuclear Reactor Safety</i>		
Intragovernmental gross costs	\$ 140,557	\$ 121,025
Less: Intragovernmental earned revenue	(28,365)	(25,984)
<i>Intragovernmental net costs</i>	112,192	95,041
Gross costs with the public	309,399	280,203
Less: Earned revenues from the public	(447,931)	(439,693)
<i>Net costs with the public</i>	(138,532)	(159,490)
<i>Total Net Cost of Nuclear Reactor Safety</i>	(26,340)	(64,449)
<i>Nuclear Materials Safety</i>		
Intragovernmental gross costs	26,727	22,270
Less: Intragovernmental earned revenue	(3,323)	(4,510)
<i>Intragovernmental net costs</i>	23,404	17,760
Gross costs with the public	68,453	67,950
Less: Earned revenues from the public	(51,642)	(52,148)
<i>Net costs with the public</i>	16,811	15,802
<i>Total Net Cost of Nuclear Materials Safety</i>	40,215	33,562
<i>Nuclear Waste Safety</i>		
Intragovernmental gross costs	25,105	24,780
Less: Intragovernmental earned revenue	(1,762)	(1,726)
<i>Intragovernmental net costs</i>	23,343	23,054
Gross costs with the public	75,793	68,859
Less: Earned revenues from the public	(16,952)	(14,305)
<i>Net costs with the public</i>	58,841	54,554
<i>Total Net Cost of Nuclear Waste Safety</i>	82,184	77,608
<i>International Nuclear Safety Support</i>		
Intragovernmental gross costs	4,937	4,951
Less: Intragovernmental earned revenue	(464)	(510)
<i>Intragovernmental net costs</i>	4,473	4,441
Gross costs with the public	11,664	11,103
Less: Earned revenues from the public	(1,728)	(1,605)
<i>Net costs with the public</i>	9,936	9,498
<i>Total Net Cost of International Nuclear Safety Support</i>	14,409	13,939
<i>Net Cost of Operations</i>	\$ 110,468	\$ 60,660

The accompanying notes to the principal statements are an integral part of this statement.

AUDITORS' REPORTS AND FINANCIAL STATEMENTS

STATEMENT OF CHANGES IN NET POSITION

(Dollars in Thousands)

For the year ended September 30,	2004		Restated 2003	
	Cumulative Results of Operations	Unexpended Appropriations	Cumulative Results of Operations	Unexpended Appropriations
<i>Beginning Balances</i>	\$ (8,089)	\$ 149,719	\$ (474)	\$ 128,336
Prior period adjustment			738	(742)
Beginning balances adjusted	(8,089)	149,719	264	127,594
<i>Budgetary Financing Sources</i>				
Appropriations received		593,000	-	560,084
Appropriations transferred-in/out		(510,439)	-	(499,119)
Other adjustments		(280)	-	(220)
Appropriations used	82,099	(82,099)	38,620	(38,620)
Non-exchange revenue	725	-	624	-
Transfers-in/out without reimbursement	(725)	-	(624)	-
<i>Other Financing Sources</i>				
Imputed financing from costs absorbed by others	25,129	-	21,978	-
Other	(1,213)	-	(8,291)	-
Total Financing Sources	106,015	182	52,307	22,125
<i>Net Cost of Operations</i>	(110,468)	-	(60,660)	-
<i>Ending Balances</i>	\$ (12,542)	\$ 149,901	\$ (8,089)	\$ 149,719

The accompanying notes to the principal statements are an integral part of this statement.



PRINCIPAL STATEMENTS

STATEMENT OF BUDGETARY RESOURCES

(Dollars in Thousands)

For the year ended September 30,	2004	Restated 2003
<i>Budgetary Resources</i>		
Budget authority		
Appropriations received	\$ 593,000	\$ 560,084
Net transfers	32,905	24,738
Unobligated balances		
Beginning of period	40,572	37,346
Spending authority from offsetting collections		
Reimbursements earned	5,491	5,337
Change in unfilled customer orders	1,298	2,928
Anticipated reimbursement and other income	-	-
<i>Total Spending Authority from Offsetting Collections</i>	6,789	8,265
Recoveries of prior year obligations	8,618	7,386
Permanently not available	(280)	(219)
<i>Total Budgetary Resources</i>	\$ 681,604	\$ 637,600
<i>Status of Budgetary Resources</i>		
Obligations incurred (Note 12)		
Direct	\$ 639,322	\$ 590,978
Reimbursable	5,953	6,050
Unobligated balance		
Apportioned	35,282	39,812
Exempt from apportionment	1,047	760
Unobligated balance not available	-	-
<i>Total Status of Budgetary Resources</i>	\$ 681,604	\$ 637,600
<i>Relationship of Obligations to Outlays</i>		
Obligated balance, net, beginning of period	\$ 143,934	\$ 136,899
Obligated balance, net, end of period		
Accounts receivable	(275)	(598)
Unfilled customer orders from Federal sources	(3,882)	(3,317)
Undelivered orders	117,150	109,484
Accounts payable	44,225	38,365
<i>Obligated balance, net, end of period</i>	\$ 157,218	\$ 143,934
Outlays		
Disbursements	\$ 623,131	\$ 581,020
Collections	(6,546)	(6,677)
Subtotal	616,585	574,343
Less: Offsetting Receipts	(545,302)	(526,273)
<i>Net Outlays</i>	\$ 71,283	\$ 48,070

The accompanying notes to the principal statements are an integral part of this statement.

AUDITORS' REPORTS AND FINANCIAL STATEMENTS

STATEMENT OF FINANCING

(Dollars in Thousands)

For the year ended September 30,	2004	Restated 2003
<i>Resources Used to Finance Activities</i>		
<i>Budgetary Resources Obligated</i>		
Obligations incurred (Note 12)	\$ 645,274	\$ 597,028
Less: Spending authority from offsetting collections and recoveries	(15,407)	(15,651)
<i>Obligations Net of Offsetting Collections and Recoveries</i>	629,867	581,377
Less: Offsetting receipts	(545,302)	(526,273)
<i>Net Obligations</i>	84,565	55,104
<i>Other Resources</i>		
Imputed financing from costs absorbed by others	25,129	21,978
Allocation transfer	3,207	1,576
Other	(1,213)	(8,291)
<i>Net Other Resources Used to Finance Activities</i>	27,123	15,263
<i>Total Resources Used to Finance Activities</i>	111,688	70,367
<i>Resources Used to Finance Items not Part of the Net Cost of Operations</i>		
Change in budgetary resources obligated for goods, services and benefits ordered but not yet provided	(5,074)	(17,318)
Resources that finance the acquisition of assets	(5,679)	(4,844)
Other	(217)	588
<i>Total Resources Used to Finance Items not Part of the Net Cost of Operations</i>	(10,970)	(21,574)
<i>Total Resources Used to Finance the Net Cost of Operations</i>	100,718	48,793
<i>Components of the Net Cost of Operations that will not Require or Generate Resources in the Current Period</i>		
Components Requiring or Generating Resources in the Future Periods		
Increase in annual leave liability	2,170	1,692
Increase (Decrease) Actuarial Workers' Compensation	(959)	11
Increase (Decrease) in Unfunded Workers' Compensation	10	(163)
Increase in Unfunded Unemployment	(5)	7
<i>Total Components of Net Cost of Operations that will Require or Generate Resources in Future Periods</i>	1,216	1,547
<i>Components not Requiring or Generating Resources:</i>		
Depreciation and amortization	8,534	10,320
<i>Total Components not Requiring or Generating Resources</i>	8,534	10,320
Total Components of Net Cost of Operations that will not Require or Generate Resources in the Current Period	9,750	11,867
<i>Net Cost of Operations</i>	\$ 110,468	\$ 60,660

The accompanying notes to the principal statements are an integral part of this statement.



NOTES TO PRINCIPAL STATEMENTS

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. Reporting Entity

The U.S. Nuclear Regulatory Commission (NRC) is an independent regulatory agency of the Federal Government that was created by the U.S. Congress to regulate the Nation's civilian use of byproduct, source, and special nuclear materials to ensure adequate protection of the public health and safety, to promote the common defense and security, and to protect the environment. Its purposes are defined by the Energy Reorganization Act of 1974, as amended, along with the Atomic Energy Act of 1954, as amended, which provide the foundation for regulating the Nation's civilian use of nuclear materials.

The NRC operates through the execution of its congressionally approved appropriations for salaries and expenses and the Inspector General, including funds derived from the Nuclear Waste Fund. In addition, transfer appropriations are provided by the U.S. Agency for International Development for the development of nuclear safety and regulatory authorities in Russia, Ukraine, Kazakhstan, and Armenia for the independent oversight of nuclear reactors in these countries.

B. Basis of Presentation

These principal statements were prepared to report the financial position and results of operations of the NRC as required by the Chief Financial Officers Act of 1990 and the Government Management Reform Act of 1994. These financial statements were prepared from the books and records of the NRC in conformity with accounting principles generally accepted in the United States of America, the requirements of Office of Management and Budget (OMB) Bulletin No. 01-09, *Form and Content of Agency Financial Statements*, and NRC accounting policies. These statements are, therefore, different from the financial reports, also prepared by the NRC pursuant to OMB directives, which are used to monitor and control NRC's use of budgetary resources.

NRC has not presented a Statement of Custodial Activity because the amounts involved are immaterial and incidental to its operations and mission.

The strategic arenas as presented on the Statement of Net Cost are based on the strategic plans and are described as follows:

Nuclear Reactor Safety which encompasses all NRC efforts to ensure that civilian nuclear power reactor facilities, as well as test and research reactors, are operated in a manner that adequately protects public health and safety and the environment, and that safeguards special nuclear materials used in reactors.

AUDITORS' REPORTS AND FINANCIAL STATEMENTS

Nuclear Materials Safety which encompasses NRC efforts to ensure that nuclear fuel cycle facilities; and academic, industrial, and medical uses of nuclear materials are handled in a manner that adequately protects public health and safety and the environment, and protects against radiological sabotage and theft or diversion of special nuclear materials.

Nuclear Waste Safety which encompasses NRC efforts to ensure that the decommissioning of nuclear reactors and other facilities, storage of spent nuclear fuel, transportation of radioactive materials, and disposal of radioactive wastes are handled in a manner that adequately protects public health and safety and the environment, and protects against radiological sabotage and theft or diversion of special nuclear materials.

International Nuclear Safety Support which encompasses international nuclear safety and regulatory policy formulation, import-export licensing for nuclear materials and equipment, treaty implementation, and international information exchange.

C. Budgets and Budgetary Accounting

Budgetary accounting measures appropriation and consumption of budget/spending authority or other budgetary resources and facilitates compliance with legal constraints and controls over the use of Federal funds. Under budgetary reporting principles, budgetary resources are consumed at the time of purchase. Assets and liabilities, which do not consume current budgetary resources, are not reported, and only those liabilities for which valid obligations have been established are considered to consume budgetary resources.

For the past 30 years, Congress has enacted no-year appropriations, which are available for obligation by NRC until expended. The Energy and Water Development Appropriations Act, 2004, requires the NRC to recover approximately 92 percent of its new budget authority of \$625.6 million by assessing fees less amounts derived from the Nuclear Waste Fund of \$32.9 million. The \$625.6 million includes recissions of \$280 thousand to NRC's appropriation from P.L. 108-199 and \$195 thousand to the Nuclear Waste Fund appropriation. The \$625.6 million does not include any amounts transferred from the U.S. Agency for International Development.

For FY 2003, NRC recovered approximately 94 percent of its new budget authority of \$584.6 million less amounts derived from the Nuclear Waste Funds of \$24.7 million.



NOTES TO PRINCIPAL STATEMENTS

D. Basis of Accounting

Transactions are recorded on an accrual accounting basis. Under the accrual method, revenues are recognized when earned and expenses are recognized when a liability is incurred, without regard to receipt or payment of cash. Interest on borrowings of the U.S. Treasury is not included as a cost to NRC's programs and is not included in the accompanying financial statements.

E. Revenues and Other Financing Sources

The NRC is required to offset its appropriations by the amount of revenues received during the fiscal year by assessing fees. The NRC assesses two types of fees to recover its budget authority: (1) fees assessed under 10 Code of Federal Regulations (CFR) Part 170 for licensing, inspection, and other services under the authority of the Independent Offices Appropriation Act of 1952 to recover the NRC's costs of providing individually identifiable services to specific applicants and licensees; and (2) annual fees assessed for nuclear facilities and materials licensees under 10 CFR Part 171. All fees, with the exception of civil penalties, are exchange revenues in accordance with Statement of Federal Financial Accounting Standards No. 7, *Accounting for Revenue and Other Financing Sources and Concepts for Reconciling Budgetary and Financial Accounting*.

For accounting purposes, appropriations are recognized as financing sources (appropriations used) at the time expenses are accrued. At the end of the fiscal year, appropriations recognized are reduced by the amount of assessed fees collected during the fiscal year to the extent of new budget authority for the year. Collections which exceed the new budget authority are held to offset subsequent years' appropriations. Appropriations expended for property and equipment are recognized as expenses when the asset is consumed in operations (depreciation and amortization).

F. Fund Balances with Treasury and Cash and Other Monetary Assets

The NRC's cash receipts and disbursements are processed by the U.S. Treasury. The fund balances with the U.S. Treasury and cash are primarily appropriated funds that are available to pay current liabilities and to finance authorized purchase commitments. Funds with Treasury represent NRC's right to draw on the U.S. Treasury for allowable expenditures. All amounts are available to NRC for current use. Cash balances held outside the U.S. Treasury are not material.

G. Accounts Receivable

Accounts receivable consist of amounts owed to the NRC by other Federal agencies and the public. Amounts due from the public are presented net of an allowance for

AUDITORS' REPORTS AND FINANCIAL STATEMENTS

uncollectible accounts. The allowance is based on an analysis of the outstanding balances. Receivables from Federal agencies are expected to be collected; therefore, there is no allowance for uncollectible accounts.

H. Non-Entity Assets

Accounts receivable include non-entity assets of \$7,000 and \$44,000 at September 30, 2004 and 2003, respectively, and consist of miscellaneous penalties and interest due from the public, which, when collected, must be transferred to the U.S. Treasury.

I. Property and Equipment

Property and equipment consist primarily of typical office furnishings, nuclear reactor simulators, and computer hardware and software. The costs of internal use software include the full cost of salaries and benefits from agency personnel involved in software development. The agency has no real property. The land and buildings in which NRC operates are provided by the General Services Administration (GSA), which charges NRC rent that approximates the commercial rental rates for similar properties.

Property with a cost of \$50,000 or more per unit and a useful life of 2 years or more is capitalized at cost and depreciated using the straight-line method over the useful life. Other property items are expensed when purchased. Normal repairs and maintenance are charged to expense as incurred.

J. Accounts Payable

Accounts payable represent vendor invoices for services received by NRC that will be paid at a later date.

K. Liabilities Not Covered by Budgetary Resources

Liabilities represent the amount of monies or other resources that are likely to be paid by NRC as the result of a transaction or event that has already occurred. No liability can be paid by NRC absent an appropriation. Liabilities for which an appropriation has not been enacted and for which there is no certainty that an appropriation will be enacted are classified as Liabilities Not Covered by Budgetary Resources. Also, NRC liabilities arising from sources other than contracts can be abrogated by the Government acting in its sovereign capacity.

Intragovernmental

The U.S. Department of Labor (DOL) paid Federal Employees Compensation Act (FECA) benefits on behalf of NRC which had not been billed or paid by NRC as of September 30, 2004, and 2003, respectively.



NOTES TO PRINCIPAL STATEMENTS

Federal Employee Benefits

Federal employee benefits represent the actuarial liability for estimated future FECA disability benefits. The future workers' compensation estimate was generated by DOL from an application of actuarial procedures developed to estimate the liability for FECA, which includes the expected liability for death, disability, medical, and miscellaneous costs for approved compensation cases. The liability was calculated using historical benefit payment patterns related to a specific incurred period to predict the ultimate payments related to that period. These projected annual benefit payments were discounted to present value. The interest rate assumptions utilized for discounting benefits were 4.88 percent for FY 2004 and 3.84 percent for FY 2003.

Other

Accrued annual leave represents the amount of annual leave earned by NRC employees but not yet taken.

L. Contingencies

Contingent liabilities are those where the existence or amount of the liability cannot be determined with certainty pending the outcome of future events. The NRC is a party to various administrative proceedings, legal actions, environmental suits, and claims brought by or against it. Based on the advice of legal counsel concerning contingencies, it is the opinion of management that the ultimate resolution of these proceedings, actions, suits, and claims will not materially affect the agency's financial statements.

M. Annual, Sick, and Other Leave

Annual leave is accrued as it is earned and the accrual is reduced as leave is taken. Each year, the balance in the accrued annual leave liability account is adjusted to reflect current pay rates. To the extent that current or prior year funding is not available to cover annual leave earned but not taken, funding will be obtained from future financing sources. Sick leave and other types of nonvested leave are expensed as taken.

N. Retirement Plans

NRC employees belong to either the Federal Employees Retirement System (FERS) or the Civil Service Retirement System (CSRS). For FY 2004 and FY 2003, employees belonging to FERS, the NRC withheld 0.8 percent of base pay earnings, in addition to Federal Insurance Contribution Act (FICA) withholdings, and matched the withholdings with a 10.7 percent contribution. The sum is transferred to the Federal Employees Retirement Fund. For employees covered by CSRS, NRC

AUDITORS' REPORTS AND FINANCIAL STATEMENTS

withholds 7 percent of base pay earnings. The NRC matched this withholding with a 7 percent contribution in FY 2004 and FY 2003.

The Thrift Savings Plan (TSP) is a retirement savings and investment plan for employees belonging to either FERS or CSRS. For employees belonging to FERS, NRC automatically contributes 1 percent of base pay to their account and matches contributions up to an additional 4 percent. The maximum percentage of base pay that an employee participating in FERS may contribute is 14 percent in calendar year (CY) 2004, and 13 percent in CY 2003. Employees belonging to CSRS may contribute up to 9 percent of their salary in CY 2004, and 8 percent in CY 2003, but there is no NRC matching of the contribution. The maximum amount that either FERS or CSRS employees may contribute to the plan is \$13,000 in the CY 2004 and \$12,000 in the CY 2003. The sum of the employees' and NRC's contributions are transferred to the Federal Retirement Thrift Investment Board.

The NRC does not report on its financial statements FERS and CSRS assets, accumulated plan benefits, or unfunded liabilities, if any, applicable to its employees. Reporting such amounts is the responsibility of the U.S. Office of Personnel Management. The portion of the current and estimated future outlays for CSRS not paid by NRC is, in accordance with Statement of Federal Financial Accounting Standards No. 5, Accounting for Liabilities of the Federal Government, included in NRC's financial statements as an imputed financing source.

O. Leases

The total capital lease liability is funded on an annual basis and included in NRC's annual budget. The NRC's capital leases are for personal property consisting of reproduction equipment which is installed at NRC headquarters. During the first quarter FY 2004, one of the capital leases (3 years at 6.59 percent) was completed. In FY 2004, two new capital leases were identified which were for 5 years and the interest rate paid was 4.38 percent for both leases. For FY 2003, the leases were for 3 and 5 years and the interest rate paid was 6.59 percent and 4.38 percent, respectively. The reproduction equipment is depreciated over 5 years using the straight-line method with no salvage value.

Operating leases consist of real property leases with GSA. The leases are for NRC's headquarters and regional offices. The GSA charges NRC lease rates which approximate commercial rates for comparable space.



NOTES TO PRINCIPAL STATEMENTS

P. U.S. Department of Energy Charges

Financial transactions between the Department of Energy (DOE) and NRC are fully automated through the U.S. Treasury's Intragovernmental Payment and Collection (IPAC) System. The IPAC System allows DOE to collect amounts due from NRC directly from NRC's account at the U.S. Treasury for goods and/or services rendered. Project manager verification of goods and/or services received is subsequently accomplished through a system-generated voucher approval process. The vouchers are returned to the Office of the Chief Financial Officer documenting that the charges have been accepted.

Q. Pricing Policy

The NRC provides goods and services to the public and other Government entities. In accordance with OMB Circular No. A-25, User Charges, and the Independent Offices Appropriation Act of 1952, NRC assesses fees under 10 CFR Part 170 for licensing and inspection activities to recover the full cost of providing individually identifiable services.

The NRC's policy is to recover the full cost of goods and services provided to other Government entities where: (1) the services performed are not part of its statutory mission and (2) NRC has not received appropriations for those services. Fees for reimbursable work are assessed at the 10 CFR Part 170 rate with minor exceptions for programs that are nominal activities of the NRC.

R. Net Position

The NRC's net position consists of unexpended appropriations and cumulative results of operations. Unexpended appropriations represent appropriated spending authority that is unobligated and has not been withdrawn by Treasury, and obligations that have not been paid. Cumulative results of operations represent the excess of financing sources over expenses since inception.

S. Use of Management Estimates

The preparation of the accompanying financial statements in accordance with generally accepted accounting principles requires management to make certain estimates and assumptions that directly affect the results of reported assets, liabilities, revenues, and expenses. Actual results could differ from these estimates.

AUDITORS' REPORTS AND FINANCIAL STATEMENTS

NOTE 2. FUND BALANCES WITH TREASURY

(In thousands)	2004	Restated 2003
Fund Balances		
Appropriated funds	\$ 193,547	\$ 184,487
Allocation transfers	3,839	5,183
Other fund types	2,891	3,750
Total	<u>\$ 200,277</u>	<u>\$ 193,420</u>
Status of Fund Balance with Treasury		
Unobligated Balance		
Available		
Appropriated funds	\$ 36,329	\$ 40,572
Allocation transfers	1,857	2,948
Unavailable	3,046	4,063
Obligated balance not yet disbursed	159,045	145,837
Total	<u>\$ 200,277</u>	<u>\$ 193,420</u>

NOTE 3. ACCOUNTS RECEIVABLE

(In thousands)	2004	Restated 2003
Intragovernmental		
Receivables and reimbursements	<u>\$ 3,357</u>	<u>\$ 2,667</u>
Receivables with the Public		
Materials and facilities fees - billed	\$ 3,060	\$ 4,657
Materials and facilities fees - unbilled	49,684	48,605
Other (Penalties and Interest)	37	110
Total Accounts Receivable	<u>52,781</u>	<u>53,372</u>
Less: Allowance for uncollectible accounts	(2,133)	(2,811)
Accounts Receivable, Net	<u>\$ 50,648</u>	<u>\$ 50,561</u>



NOTES TO PRINCIPAL STATEMENTS

NOTE 4. PROPERTY AND EQUIPMENT, NET

(In thousands)

Fixed Assets Class	Service Years	Acquisition Value	Accumulated Depreciation and Amortization	2004 Net Book Value	Restated 2003 Net Book Value
Equipment	5-8	\$ 15,691	\$ (13,867)	\$ 1,824	\$ 2,345
ADP software	5	40,628	(30,340)	10,288	15,310
ADP software under development	-	3,897	-	3,897	2,318
Leasehold improvements	20	21,856	(11,240)	10,617	10,153
Leasehold improvements in progress		57	-	57	79
		<u>\$ 82,129</u>	<u>\$ (55,447)</u>	<u>\$ 26,683</u>	<u>\$ 30,205</u>

NOTE 5. OTHER LIABILITIES

(In thousands)

	2004	Restated 2003
Intragovernmental		
Liability to offset net accounts receivable for fees assessed	\$ 53,704	\$ 52,490
Liability from fees collected which will offset current year's appropriations	2,857	3,590
Liability to offset miscellaneous accounts receivable	7	42
Liability for advances from other agencies	1,778	1,222
Accrued workers' compensation	1,655	1,646
Accrued unemployment compensation	24	29
Employee benefit contributions	1,543	1,063
Total Intragovernmental Other Liabilities	<u>\$ 61,568</u>	<u>\$ 60,082</u>

The liability to offset the net accounts receivable for fees assessed represents amounts which, when collected, will be transferred to the U.S. Treasury to offset NRC's appropriations in the year collected.

(In thousands)

	2004	2003
Accrued annual leave	\$ 32,205	\$ 30,035
Accrued salaries	13,001	8,137
Contract holdbacks, advances, and other	3,111	3,532
Total Other Liabilities	<u>\$ 48,317</u>	<u>\$ 41,704</u>

Other liabilities, except accrued annual leave, contract holdbacks, and advances from others, are current.

AUDITORS' REPORTS AND FINANCIAL STATEMENTS

NOTE 6. LIABILITIES NOT COVERED BY BUDGETARY RESOURCES

(In thousands)	<u>2004</u>	<u>Restated 2003</u>
Intragovernmental		
FECA paid by DOL	\$ 1,655	\$ 1,646
Accrued unemployment compensation	24	29
Federal Employee Benefits		
Future FECA	8,114	9,073
Other		
Accrued annual leave	32,205	30,035
Total Liabilities not Covered by Budgetary Resources	<u>\$ 41,998</u>	<u>\$ 40,783</u>

NOTE 7. LEASES

(In thousands)			<u>2004</u>	<u>Restated 2003</u>
Future Lease Payments Due:	<u>Fiscal Year</u>	<u>Capital</u>	<u>Operating</u>	
	2004	\$ -	\$ -	\$ -
	2005	157	22,823	22,980
	2006	164	22,054	22,218
	2007	128	22,143	22,271
	2008	-	21,013	21,013
	2009 and thereafter	-	107,031	107,031
	Total	449	195,064	195,513
Add: imputed interest		28	-	28
Total Future Lease Payments		<u>\$ 477</u>	<u>\$ 195,064</u>	<u>\$ 195,541</u>



NOTES TO PRINCIPAL STATEMENTS

NOTE 8. CUMULATIVE RESULTS OF OPERATIONS

(In thousands)	<u>2004</u>	Restated <u>2003</u>
Future funding requirements	\$ (41,998)	\$ (40,783)
Investment in property and equipment, net	26,683	30,205
Contributions from foreign cooperative research agreements	2,739	2,481
Other	34	8
Cumulative Results of Operations	<u>\$ (12,542)</u>	<u>\$ (8,089)</u>

Future funding requirements represent the amount of future funding needed to pay the accrued unfunded expenses as of September 30, 2004 and 2003. These accruals are not funded from current or prior-year appropriations and assessments, but rather should be funded from future appropriations and assessments. Accordingly, future funding requirements have been recognized for the expenses that will be paid from future appropriations.

NOTE 9. EXCHANGE REVENUES

(In thousands)	<u>2004</u>	Restated <u>2003</u>
Fees for licensing, inspection, and other services	\$ 546,515	\$ 534,565
Revenue from reimbursable work	5,652	5,916
Total Exchange Revenues	<u>\$ 552,167</u>	<u>\$ 540,481</u>

NOTE 10. BUDGET FUNCTIONAL CLASSIFICATION

(In thousands)	<u>2004</u>			Restated <u>2003</u>
Functional Classification	Gross Cost	Earned Revenue	Net Cost	Net Cost
276- Energy Information, Policy, & Regulation	\$ 659,389	\$ 552,167	\$ 107,222	\$ 56,391
150- AID International Affairs	3,246	-	3,246	4,269
Total	<u>\$ 662,635</u>	<u>\$ 552,167</u>	<u>\$ 110,468</u>	<u>\$ 60,660</u>
Intragovernmental				
276 - Energy Information, Policy, & Regulation	\$ 194,079	\$ 33,914	\$ 160,165	\$ 136,027
150 - AID International Affairs	3,246	-	3,246	4,269
Total	<u>\$ 197,325</u>	<u>\$ 33,914</u>	<u>\$ 163,411</u>	<u>\$ 140,296</u>

AUDITORS' REPORTS AND FINANCIAL STATEMENTS

NOTE 11. FINANCING SOURCES OTHER THAN EXCHANGE REVENUE

(In thousands)

Appropriated Funds Used

Collections were used to reduce the fiscal year's appropriations recognized:

	<u>2004</u>	<u>Restated 2003</u>
Funds consumed	\$ 627,401	\$ 564,893
Less: collection from fees assessed	(545,302)	(526,273)
Appropriated funds used	<u>\$ 82,099</u>	<u>\$ 38,620</u>

Funds consumed includes \$43.8 million and \$39.8 million through September 30, 2004 and 2003, respectively, of available funds from prior years.

Non-Exchange Revenue

	<u>2004</u>	<u>2003</u>
Civil penalties	\$ 622	\$ 353
Miscellaneous receipts	103	271
Total Non-Exchange Revenue	<u>\$ 725</u>	<u>\$ 624</u>

Imputed Financing

	<u>2004</u>	<u>2003</u>
Civil Service Retirement System	\$ 13,073	\$ 11,588
Federal Employee Health Benefit	11,924	9,832
Federal Employee Group Life Insurance	57	53
Judgements Awards	75	505
Total Imputed Financing	<u>\$ 25,129</u>	<u>\$ 21,978</u>

Transfers In/Out

	<u>2004</u>	<u>2003</u>
Transfers out to Treasury		
License Fees	\$ 545,302	\$ 526,273
Non-exchange revenue	725	624
Total Transfers-Out to Treasury	<u>\$ 546,027</u>	<u>\$ 526,897</u>



NOTES TO PRINCIPAL STATEMENTS

NOTE 12. TOTAL OBLIGATIONS INCURRED

(In thousands)

	<u>2004</u>	<u>Restated 2003</u>
Direct Obligations		
Category A	\$ 606,764	\$ 565,784
Exempt from Apportionment	<u>32,558</u>	<u>25,194</u>
Total Direct Obligations	<u>639,322</u>	590,978
Reimbursable Obligations	<u>5,953</u>	<u>6,050</u>
Total Obligations Incurred	<u>\$ 645,275</u>	<u>\$ 597,028</u>

Obligations exempt from apportionment are the result of funds derived from the Nuclear Waste Fund. Category A Obligations consist of NRC appropriations only.

NOTE 13. RESTATEMENT OF FY 2003 FINANCIAL STATEMENTS

NRC restated the FY 2003 financial statements to reflect approximately \$3 million in fees that had not been previously billed due to deficiencies in the fee billings system and to record two previously unrecorded capital leases for equipment acquired in FY 2002. The ending obligated balance in the Statement of Budgetary Resources was also restated to reclassify unfilled customer orders of \$4.7 million.

As a result of the restatement, assets, liabilities, net position, and net cost of operations were changed as follows:

Account Classes	As Previously Reported	As Restated
Assets	\$ 276,244	\$ 279,825
Liabilities	134,599	138,195
Net Position	141,645	141,630
Net Cost of Operations	63,646	60,660

AUDITORS' REPORTS AND FINANCIAL STATEMENTS

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF INTRAGOVERNMENTAL ASSETS AND LIABILITIES

(Dollars in Thousands)

As of September 30,

	2004	2003
Intragovernmental Assets		
Fund Balance with Treasury		
Department of the Treasury	\$ 200,277	\$ 193,420
Accounts Receivable		
Tennessee Valley Authority	2,952	1,844
Department of Energy	171	600
Other Agencies	234	223
<i>Total Accounts Receivable</i>	3,357	\$ 2,667
Other Assets		
General Services Administration	-	487
Department of Commerce	778	227
Department of Interior	588	664
Department of the Navy	634	1,495
Department of Labor	42	42
Other Agencies	253	18
<i>Total Other Assets</i>	2,295	2,933
Total Intragovernmental Assets	\$ 205,929	\$ 199,020
Intragovernmental Liabilities		
Accounts Payable		
General Services Administration	\$ 1,223	\$ 953
Department of Energy	6,330	5,851
Other Agencies	1,011	595
<i>Total Accounts Payable</i>	8,564	7,399
Other Liabilities		
Department of the Treasury - General Fund	56,561	56,080
Department of Labor	1,679	1,675
Office of Personnel Management	1,543	1,063
Other Agencies	1,785	1,264
<i>Total Other Liabilities</i>	61,568	60,082
Total Intragovernmental Liabilities	\$ 70,132	\$ 67,481

(Dollars in Thousands)

As of September 30,

	2004	2003
Intragovernmental Liabilities		
Accounts Payable		
General Services Administration	\$ 1,223	\$ 953
Department of Energy	6,330	5,851
Other Agencies	1,011	595
<i>Total Accounts Payable</i>	8,564	7,399
Other Liabilities		
Department of the Treasury - General Fund	56,561	56,080
Department of Labor	1,679	1,675
Office of Personnel Management	1,543	1,063
Other Agencies	1,785	1,264
<i>Total Other Liabilities</i>	61,568	60,082
Total Intragovernmental Liabilities	\$ 70,132	\$ 67,481



REQUIRED SUPPLEMENTARY INFORMATION

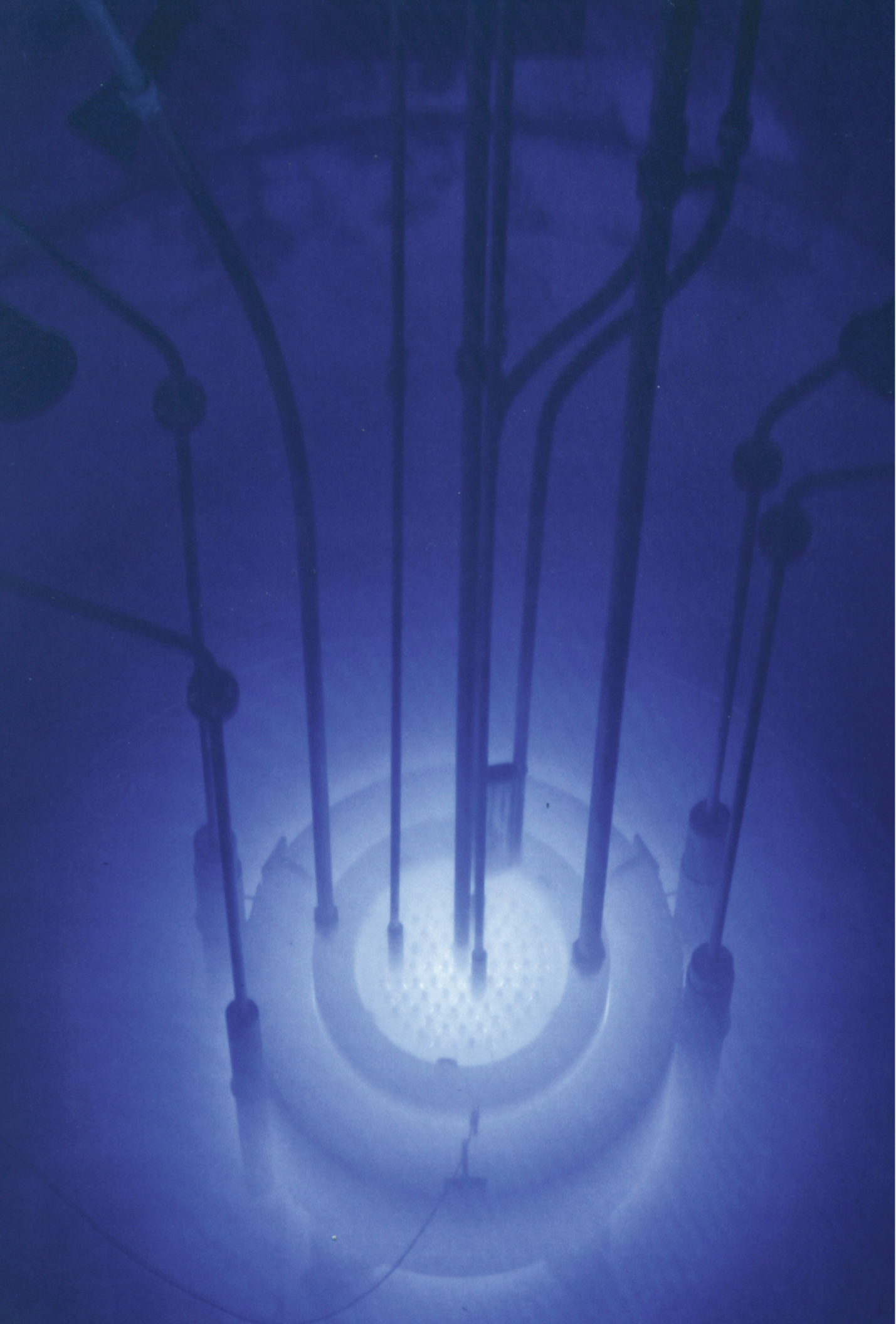
SCHEDULE OF BUDGETARY RESOURCES

(Dollars in Thousands)

For the year ended September 30, 2004

	X0200	X0300	Total
Budgetary Resources			
Budget authority			
Appropriations received	\$ 585,700	\$ 7,300	\$ 593,000
Net transfers	32,905	-	32,905
Unobligated balances			
Beginning of period	39,351	1,221	40,572
Spending authority from offsetting collections			
Reimbursements earned	5,491	-	5,491
Change in unfilled customer orders	1,298	-	1,298
Anticipated reimbursement and other income	-	-	0
<i>Total Spending Authority from Offsetting Collections</i>	6,789	0	6,789
Recoveries of prior year obligations	8,529	89	8,618
Permanently not available	(277)	(3)	(280)
Total Budgetary Resources	\$ 672,997	\$ 8,607	\$ 681,604
Status of Budgetary Resources:			
Obligations incurred			
Direct	\$ 632,012	\$ 7,310	\$ 639,322
Reimbursable	5,953	-	5,953
Unobligated balance			
Apportioned	33,985	1,297	35,282
Exempt from apportionment	1,047	-	1,047
Unobligated balance not available	-	-	0
Total Status of Budgetary Resources	\$ 672,997	\$ 8,607	\$ 681,604
Relationship of Obligations to Outlays:			
Obligated balance, net, beginning of period	\$ 142,862	\$ 1,072	\$ 143,934
Obligated balance, net, end of period:			
Accounts receivable	(275)	-	(275)
Unfilled customer orders from Federal sources	(3,882)	-	(3,882)
Undelivered orders	116,254	896	117,150
Accounts payable	43,822	403	44,225
<i>Obligated balance, net , end of period</i>	\$ 155,919	\$ 1,299	\$ 157,218
Outlays:			
Disbursements	\$ 616,137	\$ 6,994	\$ 623,131
Collections	(6,545)	(1)	(6,546)
<i>Subtotal</i>	609,592	6,993	616,585
Less: Offsetting receipts	(538,589)	(6,713)	(545,302)
Net Outlays	\$ 71,003	\$ 280	\$ 71,283

AUDITORS' REPORTS AND FINANCIAL STATEMENTS



APPENDIXES

APPENDIX A

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



October 4, 2004

MEMORANDUM TO: Chairman Diaz

FROM: Hubert T. Bell
Inspector General 

SUBJECT: INSPECTOR GENERAL'S ASSESSMENT OF THE
MOST SERIOUS MANAGEMENT CHALLENGES FACING
NRC (OIG-05-A-01)

SUMMARY

On January 24, 2000, Congress enacted the *Reports Consolidation Act of 2000* to provide financial and performance management information in a more meaningful and useful format for the Congress, the President, and the public. Included in the Act is the requirement that the Inspector General of each Federal agency summarize what he or she considers to be the most serious management and performance challenges facing the agency and assess the agency's progress in addressing those challenges. In compliance with the *Reports Consolidation Act of 2000*, I am submitting my annual assessment of the most serious management challenges confronting the United States Nuclear Regulatory Commission (NRC). Also, included in this submission is a listing of the Office of the Inspector General (OIG) audit and investigative reports issued during fiscal year 2004. These reports address the challenges identified.

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

APPENDIX A

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

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

DISCUSSION

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

CHALLENGE 1

Protection of nuclear material used for civilian purposes.

NRC's vision, as stated in its Strategic Plan for FY 2004-2009, is "Excellence in regulating the safe and secure use and management of radioactive materials for the public good." NRC is authorized to grant licenses for the possession and use of radioactive materials (e.g., byproduct material,¹ source material,² and special nuclear material³) and establish regulations to govern the possession and use of those materials. NRC's regulations require that certain materials licensees have extensive material control and accounting programs as a condition of their license

¹ Byproduct material – (1) Any radioactive material (except special nuclear material) yielded in or made radioactive by exposure to the radiation incident to the process of producing or utilizing special nuclear material and (2) the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content. [Source: Atomic Energy Act of 1954, Section 11 (e)]

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

³ Special nuclear material – Plutonium, uranium-233, uranium enriched in the isotopes uranium-233 or uranium-235, and any other material which the Commission, pursuant to the provisions of Section 51 of the Atomic Energy Act of 1954, as amended, determines to be special nuclear material, but does not include source material; or any material artificially enriched by any of the foregoing, but does not include source material. [Source: Title 10 CFR Part 74.4]



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

and all other license applicants (including those requesting authorization to possess small quantities of special nuclear materials) must develop and implement plans that demonstrate a commitment to accurately control and account for radioactive materials.

One of NRC's and the nuclear industry's highest priorities must be ensuring adequate protection of public health and safety. Today's heightened sensitivity to the control of special nuclear materials warrants NRC's serious attention to its licensees' material control and accounting activities. The challenges currently facing NRC will be to (1) ensure that there are adequate inspections to verify licensees' commitments to their material control and accounting programs, or a reliable special nuclear materials system; and (2) establish a means to ensure the accurate accounting for radioactive materials, especially those with the greatest potential to impact public health and safety.

According to NRC managers, most special nuclear material at power reactors is self-protecting from a health and safety point of view. The agency believes that this self-protecting aspect (i.e., handling highly radioactive reactor spent fuel is extremely dangerous) provides reasonable assurance that the material is controlled. However, NRC's requirements for nuclear power plant safety are also based on the need to protect the public from exposure to radioactive release caused by acts of sabotage. During the past fiscal year, NRC has been directing the implementation of additional security measures including determining the appropriate level of security to protect civilian nuclear power facilities.

The Commission determined that greater efficiency and effectiveness would be achieved by consolidating certain NRC safeguards, security, and incident response functions into the Office of Nuclear Security and Incident Response (NSIR). As a result, in June 2004, the Commission transferred the Emergency Preparedness Directorate to NSIR.

Additionally, NRC continued to improve its security performance evaluation program (force-on-force evaluations) for ensuring protection of the Nation's civilian nuclear power plants. Under that program, NRC has increased the frequency of force-on-force exercises per year. In addition, each plant is required to conduct independent exercises.

APPENDIX A

RELATED OFFICE OF THE INSPECTOR GENERAL WORK

Audits

- Audit of NRC's Incident Response Program
- Audit of NRC's Management of Import/Export Authorizations
- Special Evaluation of the Office of Investigations' Role in Alleged Discrimination Cases
- NRC Contract for Review of Office of Investigations' Investigative Methods and Techniques
- Review of NRC's Reactor Operating Experience Task Force Report
- Audit of the Licensing Support Network

Investigations

- NRC's Oversight of Davis-Besse Boric Acid Leakage and Corrosion During the April 2000 Refueling Outage

CHALLENGE 2

Protection of information.

As a result of increased terrorist activity worldwide, NRC reexamined its practice of releasing most documents to the public. NRC employees create and work on a significant amount of information that is sensitive and needs to be protected. This can be sensitive unclassified information or classified national security information contained in written documents and various electronic databases. Although the agency has made strides in improving the withholding of information on NRC's website, the OIG's work found that there have been other instances where information that was unclassified, but still sensitive, was made available to the public.

The Executive Director for Operations (EDO) stated that NRC recently modified guidance concerning the criteria to be applied in considering what information should be withheld from public disclosure. The standard, established by the Commission, is that any information that could be useful, or could possibly be expected to be useful, to a terrorist in a potential attack should be withheld. Because these types of decisions represent a subjective judgment, the agency plans to develop formal written guidance (with illustrative examples) on information that should be withheld from the public. In addition, the agency plans to train employees in this area.



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

RELATED OFFICE OF THE INSPECTOR GENERAL WORK

Audits

- Audit of NRC's Protection of Safeguards Information
- Audit of Federal Information Security Management Act
- Audit of the Licensing Support Network
- Review of NRC's Personnel Security Program Contractor Policies and Practices
- Review of NRC's Drug-Free Workplace Plan
- Review of NRC's Personnel Security Program

Investigations

- Improper Release of Official Use Only Information by NRC Contractor
- Improper Release of Predecisional/Classified Information
- Improper Release of Sensitive Information
- Improper Release of Proprietary Information By an NRR Employee
- Improper Distribution of Safeguards Information
- Adequacy of Criminal History Checks for Unescorted Site Access to Nuclear Facilities of Dominion Power

CHALLENGE 3

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

The Chairman has stated that NRC has increased its safety focus on licensing and oversight activities through application of a balanced combination of experience, deterministic models, and probabilistic analysis. This approach is known as risk-informed and performance-based regulation. However, NRC continues to face challenges in making its regulatory framework more risk-informed for nuclear power plants and nuclear material licensees.

Incorporating risk analysis into regulatory decisions improves the regulatory process by focusing both NRC and licensee attention and activities on the areas of highest risk. This may result in reducing unnecessary burden on licensees and increasing the efficiency and effectiveness of the

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agency's resources. NRC and its licensees have enhanced their safety focus through a concerted effort to ensure adequate protection of public health and safety through the following efforts:

- Continued to develop and implement risk-informed and performance-based practices in regulatory processes through rulemaking activities.
- Developed a plan, which is under consideration, for implementing changes in the reactor program to enhance the current environment for risk-informed regulation.
- Reviewed and revised all inspection procedures in Title 10 CFR Part 70 (which provides for increasing the use of risk information in regulating fuel cycle facilities).

RELATED OFFICE OF THE INSPECTOR GENERAL WORK

Audits

- Review of NRC's Reactor Operating Experience Task Force Report

CHALLENGE 4

Ability to modify regulatory processes to meet changing external demands.

As a result of the changing regulatory and business environment, new areas of increased emphasis have been created for the NRC. These are detailed in the NRC Strategic Plan. External as well as internal demands drive the NRC towards ensuring that it is more open in its regulatory processes. This results in a constant balancing of long-term improvement efforts and shorter-term emergent issues.

NRC continues to face challenges related to its ability to address workloads associated with reactor license renewals, new plant licensing, licensee requests to increase power levels, and high-level waste disposal.

Reactor License Renewals

NRC's license renewal program is one of the major elements of its regulatory work. NRC approval allows a plant to extend the life of a facility for an additional twenty years past its original 40-year license term. Further, there continues to be a sustained strong interest in license renewal from utilities. To regulate this activity, the NRC established the license renewal and



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environmental impacts program to verify information submitted in the renewal applications. NRC is dedicated to further improving the efficiency and effectiveness of the license renewal process.

New Plant Licensing

Although it has been many years since NRC licensed a new reactor, there has been renewed interest in plant construction in the U.S. In preparation for the possibility of new plant licensing, NRC instituted initiatives aimed at streamlining its regulatory licensing structure. NRC has a site permit process that allows licensees to seek pre-approval of sites for new reactor units. Through this process, the agency has received applications for early site permits. Also, NRC has certified reactor designs which the agency reviews and approves for general use. Licensees use of a pre-approved design streamlines and shortens the NRC review process.

Licensee Requests to Increase Power Levels

A licensee seeks NRC approval to operate a plant at a higher power level than the level authorized in the original license by submitting a request to increase reactor power output. As of March 2004, the NRC approved over 100 power uprate increases. Over the next five years, licensees anticipate requesting additional power uprates. The agency continues to explore more efficient ways to complete these reviews.

High-Level Waste Disposal

According to the Nuclear Waste Policy Act, the Department of Energy (DOE) has the responsibility to locate, design, build, and operate a repository for high-level nuclear waste, while NRC has the responsibility to license and regulate this facility. Over the past several years, NRC has been preparing its license application review plan. In December 2004, DOE is scheduled to tender a license application for the construction of a permanent repository for high-level nuclear waste at Yucca Mountain in Nevada. NRC anticipates that the administrative proceeding to assess the repository will be an enormous undertaking because a multitude of issues will need review in a Congressionally mandated 3 to 4 year time frame. One significant challenge for NRC is ensuring that all parties to the licensing process and key decision makers have timely access to filings and exhibits involved with the licensing process.

During FY 2004, two events occurred which could significantly impact the DOE schedule for tendering its license application and the NRC's ability to meet its Congressional mandate. One event was the ruling by a Federal court that the Environmental Protection Agency's (EPA) radiation standard relating to the proposed Yucca Mountain repository was not consistent with

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the recommendation of the National Academy of Sciences, as mandated by Congress. As a result, EPA is planning to revise its radiation standard to meet this mandate. Any change to the EPA rule will require NRC to revise its regulations in this area, as Congress also mandated that NRC must incorporate the EPA radiation standard into its regulations. The other event was a ruling by an NRC Atomic Safety Licensing Board that DOE improperly certified that it had met its regulatory obligation to make all of its documentary material related to Yucca Mountain electronically available via the NRC's licensing support network, as required by regulation. This is a significant determination, as it is DOE's certification that starts a six-month clock for when DOE's Yucca Mountain license application can be docketed. Moreover, Congressional actions regarding the NRC's budget request for FY 2005 are not yet finalized and may not be completed until well into the fiscal year.

Given these recent events, Challenge 4, the ability to modify regulatory processes to meet changing external demands, will be prominent for NRC in FY 2005 as it relates to NRC's high-level waste program.

RELATED OFFICE OF THE INSPECTOR GENERAL WORK

Audits

- Audit of NRC's Incident Response Program
- Audit of the Licensing Support Network

CHALLENGE 5

Implementation of information resources.

For this submission, the title of challenge 5 was changed from "Acquisition and implementation of information resources" as identified in November 2003 to "Implementation of information resources" to emphasize the importance of the implementation process. Acquisition is included in challenge 6 with a new designation - procurement.

Federal agencies' acquisition and implementation of information resources are crucial to (1) support critical mission-related operations and (2) provide more effective and cost-efficient Government services to the public. The necessary link of information technology to NRC's



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mission performance makes it important to have decision-making processes which ensure that funds are invested and managed to achieve high value outcomes at acceptable costs. NRC relies on a wide variety of information systems to help it fulfill its responsibilities and support its business flow. NRC, like other Federal agencies, continues to work towards obtaining a good return on these investments. In recent years, NRC has created large databases of publicly available information, including the Agencywide Documents Access and Management System (ADAMS), the Licensing Support Network, and the NRC Web site.

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

Agency E-Mail

To reduce the number of agency e-mails sent to employees on a daily basis, NRC initiated a consolidated approach to providing general network announcements to employees. Under this new approach, NRC incorporates all non-priority network announcements into one e-mail message sent to employees daily. This differs from the prior approach, where such messages were sent singly to employees at various times throughout the day. When appropriate, priority messages are still sent individually to NRC staff.

In another effort to reduce the volume of e-mail sent to employees, the agency installed a spam e-mail blocker to prevent employees from receiving unsolicited junk e-mail – generally e-mail advertising for some product sent wide-scale to a mailing list or newsgroup. Spam is a problem because it clogs the Internet and NRC's Local Area Network. NRC receives 33,000 incoming e-mails per day, and approximately 12 million e-mails annually. About 8 percent of these messages are now blocked because they are spam. NRC staff update the agency's list of spam sources on a daily basis in order to improve its ability to filter spam messages.

High-Level Waste Meta System

NRC is developing the High-Level Waste Meta System to support the agency's review and hearings pertaining to the Department of Energy's anticipated application to build a high-level waste repository at Yucca Mountain in Nevada. The Meta System is the collection of interdependent software applications, procedures, and supporting technology needed to accomplish NRC's business objectives associated with the licensing process. For example, the system will interface with ADAMS and the Licensing Support Network and will include an Electronic Information Exchange component to allow parties to submit, service, and access documents. It will also include the Electronic Hearing Docket, which will serve as the agency's official docket; the Digital Data Management System, which will submit exhibits and hearing

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transcripts to support hearing functions; and NRC's High-Level Waste Collection of records relevant to discovery.

System development is expected to cost between \$9 million and \$10 million and staff anticipate that much of the system will be functional by April 2005. The challenge for NRC will be to ensure that this important project stays on track in order to effectively support the upcoming license application review process.

System Development Life Cycle Management Methodology

NRC plans to finalize and issue a Management Directive and Handbook on the "System Development Life-Cycle Management Methodology (SDLCMM)" so that the approach can successfully be applied to the development of planned systems. The SDLCMM is a process for management, oversight, reporting, and documentation of information technology (IT) investments throughout their entire life cycle and reflects NRC's process and method for complying with legislative requirements pertaining to IT investments. NRC has been working to finalize the document. By issuing the final document, NRC will ensure that agency staff have easy access to current agency IT system requirements. It is also anticipated that the final version will reduce the burden placed on NRC offices by the methodology requirements.

RELATED OFFICE OF THE INSPECTOR GENERAL WORK

Audits

- Audit of the Licensing Support Network

Investigations

- Sale of Counterfeit Software to NRC by a GSA Supplier
- Determine Location of Missing NRC Computer Equipment
- Improper Use of NRC Information Technology by Region IV
- Inappropriate Software Installed on NRC Computers



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CHALLENGE 6

Administration of all aspects of financial management.

Sound financial management includes effective accounting/budgeting and procurement operations. A brief discussion of these areas follows.

Accounting/Budgeting

NRC must be a prudent steward of its fiscal resources through sound financial management. Sound financial management includes the production of timely, useful, and reliable information to support agency management; an effective cost accounting system; effective systems for computing and billing fees; well-developed strategic planning; and an integrated method for planning, budgeting, and assessing performance to enable NRC to align programs with outcomes.

FY 2003 was the tenth consecutive year for which NRC received an unqualified audit opinion on its financial statements. Late in FY 2003, NRC implemented corrective actions in the area of managerial cost accounting that resulted in the reclassification of this matter from a material weakness and Federal Financial Management Improvement Act substantial noncompliance to a reportable condition.

A November 15th accelerated due date for the agency's Performance and Accountability Report heightens the importance of an effective control environment⁴ and communications infrastructure within the Office of the Chief Financial Officer (OCFO). Since the annual financial statement audit report is a key component of the Performance and Accountability Report, significant matters that impact the financial statements must be promptly communicated to OCFO top management and to the OIG to ensure that the financial statements are fairly presented and that the associated audit reports are based on sound data and reliable representations. Therefore, this challenge includes OCFO's continuing need for effective internal controls, a heightened awareness of a sound control environment, and continuous improvements to timely and accurate communications.

⁴ United States General Accounting Office, *Standards for Internal Control in the Federal Government*, November 1999, defines control environment as follows:

Management and employees should establish and maintain an environment throughout the organization that sets a positive and supportive attitude toward internal control and conscientious management.

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Procurement

NRC's procurement of goods and services must be made in accordance with Federal regulations and with an aim to achieve the best value for the agency's dollars in a timely manner. During FY 2004, NRC made needed improvements to its acquisition workforce training program for project managers. Without effective management controls, the procurement process is susceptible to fraud, waste, and abuse.

RELATED OFFICE OF THE INSPECTOR GENERAL WORK

Audits

- Audit of NRC's Fiscal Year 2003 Financial Statements
- Review of NRC's Implementation of the Federal Managers' Financial Integrity Act for Fiscal Year 2003
- Report on the Application of Agreed-Upon Procedures with Respect to Intragovernmental Activity and Balances as of September 30, 2003
- Report on Applying Agreed-Upon Procedures with Respect to Federal Agencies' Centralized Trial-Balance System Data as of September 30, 2003, and for the Year Then Ended
- Report on the Application of Agreed-Upon Procedures for U.S. Office of Personnel Management
- NRC Contract for Review of Office of Investigations' Investigative Methods and Techniques
- Review of NRC's Administration of Selected Contracts and Acquisition Workforce Training
- Audit of NRC's Management of Import/Export Authorizations
- NRC's Transition to the Department of Interior as Payroll Services Provider



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

CHALLENGE 7

Communication with external stakeholders throughout NRC regulatory activities.

Management should ensure that there are adequate ways of communicating with and obtaining information from external stakeholders that may have a significant impact on the agency achieving its goals. The NRC believes that nuclear regulation is the public's business and, therefore, it should be transacted in an open and candid manner in order to maintain the public's confidence. NRC has established a strategic goal that ensures openness that expressly recognizes that the public must be informed about, and have a reasonable opportunity to participate in, the regulatory processes. The agency needs to provide a diverse group of external stakeholders (e.g., the Congress, general public, other Federal agencies, various industry and citizen groups) clear, accurate, and timely information about, and a meaningful role in, NRC's regulatory activities. This remains a challenging task.

To provide integrated leadership and direction for external communications, the Chairman established the position of Director of Communications, which reports directly to his office. As a result, during FY 2004, a new Director of Communications and three technical communication assistants were hired.

In January 2004, NRC issued guidelines for effectively communicating risk-related information to external stakeholders. The document provides guidance for agency management and staff concerning NRC-specific communication topics and situations that deal with risk to ensure the agency's openness with the public.

In June 2004, the Commission approved a proposal to conduct a limited telephone survey of targeted stakeholders as a tool to measure results in achieving NRC's strategic goal of ensuring openness. The survey will ascertain stakeholder views concerning the quality of NRC's openness in the following areas: (1) credibility as a regulator, (2) effectiveness in clearly communicating factual information, and (3) responsiveness to stakeholders' concerns.

NRC maintains a public website to encourage communication with stakeholders. The site provides a variety of links to pertinent documents, updates on activities, and information on opportunities for stakeholder input. In addition, NRC is working on an Emergency Planning website, currently in the draft stage, which should be unveiled within the next couple of months.

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RELATED OFFICE OF THE INSPECTOR GENERAL WORK

Audits

- Audit of NRC's Incident Response Program

Investigations

- Concerns Regarding Inadequate NRC Oversight of Steam Generator Inspections at Seabrook Nuclear Power Plant
- Improper Actions by an NRR Manager Towards NRC Licensees
- NRC Improperly Conducting Closed Meetings with DOE re: Yucca Mountain
- Accuracy of Information Provided by NRC Managers to Commission
- Improper Distribution of Safeguards Information
- Improper Release of Official Use Only Information by NRC Contractor

CHALLENGE 8

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

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

NRC has instituted various actions to improve its internal communications over the past year. The new Director of Communications and the technical communications assistants will be working to improve this area. The agency continues to produce electronic "EDO Updates." These represent timely and succinct communications between the EDO and the entire staff. NRC also recently redesigned its internal Web site to address different types of employee concerns. The new Web page directs employees to resources that are available to discuss a variety of issues. Moreover, NRC continues to hold "All Employees" meetings as a mechanism for direct two-way communication between the Commission and agency staff. NRC's recently issued Strategic Plan stresses the importance of the role of internal communications in achieving the agency's mission and goals.



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

The NRC established a Communications Council that will plan, coordinate, and implement the agency's internal communication strategies and share best practices across the agency.

RELATED OFFICE OF THE INSPECTOR GENERAL WORK

Audits

- Review of NRC's Reactor Operating Experience Task Force Report
- Audit of NRC's Protection of Safeguards Information
- Controls to Prevent Unauthorized Entry into the NRC Parking Garage

Investigations

- NRC's Oversight of Davis-Besse Boric Acid Leakage and Corrosion During the April 2000 Refueling Outage
- Accuracy of Information Provided by NRC Managers to Commission

CHALLENGE 9

Managing human capital.

NRC's workforce must possess detailed knowledge and specialized technical skills to fulfill its public health and safety mission. To maintain this expertise, NRC will need to build its human capital in the technical, financial, and administrative areas. NRC has identified the management of human capital as a major challenge in its new Strategic Plan. The challenges that NRC faces include loss of institutional knowledge and critical skills, an aging workforce, and a shrinking labor pool. Thirty percent of the Federal workforce will be eligible to retire in 5 years and an additional 20 percent could seek early retirement. This does not necessarily mean that 50 percent of Government employees will actually retire in the short-term, but it does emphasize how important it is for NRC to plan for its future workforce.

For these reasons, NRC periodically assesses its human capital situation looking for ways to make improvements to support the achievement of its mission and goals. This includes, but is not limited to, the following significant initiatives to offset the potential loss of human capital.

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- Use of creative recruitment, development, and retention strategies to maintain a high quality, diverse workforce with the skills needed to achieve NRC's mission.
- Use of formal development programs to maintain and develop future leaders.
- Maintenance of an effective program of training, development, and knowledge transfer to ensure that NRC acquires and maintains the appropriate knowledge, skills, and abilities to achieve its mission and goals.
- Maintenance of a healthy, safe, secure, and accessible physical work environment.

With these and other ongoing efforts, NRC believes that it will successfully target its critical skill needs and hire, develop, motivate, and retain employees with the skills needed to support the agency's Strategic Plan.

RELATED OFFICE OF THE INSPECTOR GENERAL WORK

Audits

- NRC's Implementation of Regulations Concerning Nondiscrimination Based on Handicap
- Review of NRC's Administration of Selected Contracts and Acquisition Workforce Training
- Review of NRC's Personnel Security Program

CONCLUSION

One of the OIG's strategic goals is to improve the economy, efficiency, and effectiveness of NRC corporate management. The Inspector General's identification of the most serious management challenges facing the agency and the OIG's commitment to ensuring the integrity of NRC programs and operations help achieve this goal. Further, as evidenced by this review, the agency continues to take steps to address the management challenges.

Although the nine challenges identified in this report are distinct, they are also interdependent. NRC continues to address these challenges through planning and in day-to-day operations. The following chart illustrates the linkage between the nine challenges in this report and the NRC Strategic Plan. Addressing these management challenges clearly enhances NRC's ability to successfully meet its public health and safety mission and vision.

cc: Commissioner McGaffigan
Commissioner Merrifield
Luis Reyes, EDO
William Dean, OEDO



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

LINKAGE BETWEEN OIG'S LIST OF MANAGEMENT CHALLENGES AND NRC'S STRATEGIC PLAN FOR FISCAL YEARS 2004-2009

OIG's List of Management Challenges for NRC (FY 2004)	NRC Strategic Plan References
Challenge 1 Protection of nuclear material used for civilian purposes.	Strategic Goals I and II
Challenge 2 Protection of information.	Strategic Goals II and III
Challenge 3 Development and implementation of a risk-informed and performance-based regulatory oversight approach.	Strategic Goals I, II, and IV
Challenge 4 Ability to modify regulatory processes to meet changing external demands.	Strategic Goal IV and Appendix A
Challenge 5 Implementation of information resources.	Strategic Goals II, IV, and V.D
Challenge 6 Administration of all aspects of financial management.	Strategic Goals V.A and V.C
Challenge 7 Communication with external stakeholders throughout NRC regulatory activities.	Strategic Goals III and V.D
Challenge 8 Intra-agency communication (up, down, and across organizational lines).	Strategic Goals V.A and V.F
Challenge 9 Managing human capital.	Strategic Goal V.A

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ACTIONS TO ADDRESS THE NRC'S MANAGEMENT CHALLENGES

This appendix lists the management challenges that the NRC's Inspector General identified for FY 2004 in a letter to Chairman Diaz, dated November 5, 2003, and discusses the actions that the agency has taken to address those challenges.

PROTECTION OF NUCLEAR MATERIAL AND FACILITIES USED FOR CIVILIAN PURPOSES

The NRC continues to reexamine current security measures to ensure adequate protection of the Nation's nuclear materials and facilities. In FY 2004, the agency used a risk-informed approach to assess the potential vulnerabilities of civilian nuclear facilities and activities. The agency coordinated this assessment with counterparts in the Homeland Security Council, the Department of Homeland Security, the Federal Bureau of Investigation, the Department of Energy, the Defense Threat Reduction Agency, and other agencies.

The NRC's comprehensive assessment of the security and safeguards of NRC-licensed nuclear facilities and activities resulted in the following significant improvements in FY 2004:

The NRC developed implementing guidance concerning the design-basis threat against which the Nation's power plants and selected fuel cycle facilities must be able to defend. (The NRC had previously revised the design-basis threat in FY 2003.) The Commission also issued additional Orders to require specific security enhancements for a variety of nuclear facilities and activities, including spent fuel storage and radioactive material transport. Together with the revised design-basis threat, these enhancements represent a significant step in security planning, that is consistent with the current threat environment.

The NRC revised the baseline inspection program for the physical protection cornerstone of the Reactor Oversight Process. This revised baseline program reflects changes imposed by the Commission's Orders in the areas of access authorization, fatigue, security officer training and qualification and the design-basis threat. The NRC will phase in the Implementation of the revised baseline inspection program during FY 2004–FY 2006, consistent with the implementation schedules for the revised requirements. The NRC is also developing improved performance indicators and a revised Significance Determination Process to measure licensees' security performance more effectively.



ACTIONS TO ADDRESS THE NRC'S MANAGEMENT CHALLENGES

Consistent with the Commission's Orders revising the design-basis threat, each licensee that operates a power reactor or a Category I fuel cycle facility has submitted a revision of their associated physical security plan(s), contingency response plan(s), and training and qualification plan(s) for NRC staff approval. The NRC staff intends to complete its review of all of these plans by October 29, 2004.

The agency will complete a series of vulnerability assessments in FY 2004 which will provide the technical bases for any new or revised mitigative measures that may be required to protect the Nation's nuclear materials and facilities.

In collaboration with the Department of Homeland Security, the Department of Energy, and other agencies, the NRC continued to assess the potential use of radioactive sources in radiological dispersion devices and to identify necessary enhancements in the control of radioactive sources. As a result, the agency has enhanced the security requirements for licensees that hold source material(s) designated as "high risk, high priority." The NRC staff continues to work with the Agreement States to develop appropriate enhancements for lower-priority high-risk sources. In addition, working with the Homeland Security Council, its oversight committees in Congress, the Administration, and other Federal agencies, the NRC continues to support legislative proposals to enhance the security of nuclear materials and facilities.

The NRC expanded and strengthened its information security program, which permits sharing of classified and sensitive unclassified information with authorized representatives routinely up to the SECRET National Security Information level. The NRC has significantly enhanced secure communication capabilities at headquarters and in the regional offices. In so doing, the NRC ensured timely communication among authorized individuals, while maintaining effective protection of classified and sensitive unclassified information (both internally and externally) through the use of administrative procedures and requirements that are consistent with Federal law and national programs.

The NRC continued to sustain its interaction, communication, and coordination with other Federal, State, and local agencies, as well as the international community, as it relates to homeland security, emergency response, and integrated response planning. In June 2004, the NRC reorganized to integrate these programs more effectively. The NRC continues to work with the Department of Homeland Security and other Federal agencies to revise Federal response plans and to develop and administer a National Incident Management System and a unified National Response Plan in accordance with Homeland Security Presidential Directive 5, "Management

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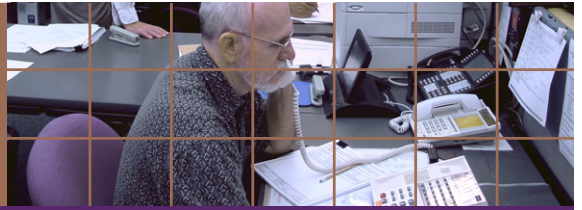
of Domestic Incidents.” The NRC significantly upgraded the agency’s Incident Response Operations Center in FY 2004 with additional staffing, improved emergency response procedures, and significant equipment upgrades such as secure telephone and fax units, upgraded satellite phones and an improved teleconferencing system. The NRC established an alternative incident response center at one of the agency’s regional offices. This alternative center has all of the capabilities of the headquarters operations center, in the event of a loss of the headquarters facility.

The NRC completed a pilot force-on-force exercise program, which reduced artificialities and increased the realism of the exercises, which were conducted at 15 volunteer commercial nuclear power reactors. The agency has since used the results of the expanded pilot exercises to revise the staff’s exercise program and improve the NRC’s processes for assessing licensees’ readiness to respond to the design-basis threat. The NRC has also met regularly with industry representatives to catalog and discuss the lessons learned from these exercises, documenting both staff and industry perspectives. In implementing the transitional force-on-force program, the NRC has also increased the frequency of force-on-force drills at power reactor facilities from once every 8 years to once every 3 years. As intended, force-on-force exercises have been a primary means to conduct performance-based testing of a licensee’s security plan and its ability to prevent radiological sabotage. The agency will complete a transitional force-on-force exercise program in early FY 2005, to be followed by full implementation.

In conjunction with implementing the revised design-basis threat, the NRC established additional personnel security measures to mitigate the risk of insiders’ involvement in acts of radiological sabotage or theft or diversion of special nuclear material. Lastly, the NRC has conducted meetings with stakeholders that contributed significantly towards increasing the agency’s public outreach and meeting the agency’s openness goals in the Homeland Security area.

PROTECTION OF INFORMATION

In FY 2004, the NRC continued to maintain compliance with the Federal Information Security Management Act. The NRC’s major operational applications and general support systems meet the requirements of Management Directive 12.5, “NRC Automated Information Systems Program,” including a system security plan, contingency plan, certification, and accreditation. The NRC staff has increased its efforts to provide independent review, testing, and evaluation of major system security plans. The NRC has an effective information technology security training and awareness program. All employees are required to complete an online information technology security training course, and NRC information systems security officers and other employees and support contractors with significant security responsibilities are required to complete a more advanced online technical security course. The NRC established an information



ACTIONS TO ADDRESS THE NRC'S MANAGEMENT CHALLENGES

technology security Web page, providing information that NRC employees need to facilitate timely awareness of information technology security issues. The NRC has a robust incident reporting program in place, and files monthly reports to the Federal Computer Incident Response Center. In FY 2004, the staff will conduct a pilot of a secure Intranet solution to provide the capability for NRC users to process and protect their sensitive information using the agency's network. The NRC staff will determine requirements to field secure Intranet capabilities for all agency users.

On September 26, 2003, the Office of Management and Budget issued guidance for implementing the privacy provisions of the E-Government Act of 2002, which requires the NRC to assess how the agency handles information about individuals when information technology is used to collect new information, when the agency develops or procures new information technology systems to handle the collection of information that identifies specific individuals. The NRC began implementing the requirements of the E-Government Act in FY 2003, based on direction from the Office of Management and Budget that Federal agencies should pattern their procedures after the Internal Revenue Service's "best practices" for Privacy Impact Assessments. Specifically, a privacy impact assessment is required for each new information technology system that handles personal information about individuals. The NRC is currently completing its formal procedures based on experience in reviewing privacy impact assessments during the past year. The NRC is revising the agency's procedures to enhance the staff guidance concerning when to prepare a privacy impact assessment, to provide a standard format for preparing such assessments, and to document the review process. These procedures will help ensure that the NRC will adequately protect personal information concerning members of the public that provide such information electronically.

DEVELOPMENT AND IMPLEMENTATION OF A RISK-INFORMED AND PERFORMANCE-BASED REGULATORY OVERSIGHT APPROACH

For many years, the NRC has developed and adapted methods for undertaking probabilistic risk assessments and performance assessments to enable the agency to understand better the risks associated with licensed activities. During FY 2004, the NRC built on these methods by supporting the development of calculation tools and experimental results to provide the basis for risk-informed regulation. Risk-informed regulation is a decision-making approach that uses risk analysis, along with engineering studies, to focus regulatory and licensee attention on design and operational issues in a manner that is commensurate with the risks that those issues pose to public health and safety. Incorporating risk analysis into regulatory decisions improves the regulatory process by focusing NRC and licensee attention and activities on the areas of highest risk, thereby reducing unnecessary burden on licensees and increasing efficiency and effectiveness in the use of agency resources.

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The NRC's Strategic Plan for FY 2000–FY 2005 states that a key to achieving the agency's strategic and performance goals is to continue to develop and implement risk-informed and performance-based practices in the NRC's regulatory processes. To further our goal of broadly applying risk techniques to the agency's regulatory processes, the NRC has developed a risk-informed regulatory implementation plan. This plan is of such importance that the NRC has included milestones for further implementing the risk-informed regulatory implementation plan as a performance measure in working toward the goal to make the agency's activities and decisions more effective, efficient, and realistic. During FY 2004, the NRC has taken actions across the agency to meet this challenge, as described in the following paragraphs.

Nuclear Reactor Safety: During FY 2004, the NRC assessed stakeholder feedback and reviewed annual assessments to evaluate the agency's success in implementing the revised Reactor Oversight Process. These assessments continue to show that the revised Reactor Oversight Process has resulted in a more objective, risk-informed, and predictable regulatory process. The risk-informed Reactor Oversight Process has focused NRC and licensee resources on aspects of plant performance that have the greatest impact on safe plant operation. One example of the NRC's initiative in this area is the development of a Mitigating Systems Performance Index, a new risk-informed performance index that the NRC and the nuclear industry have jointly proposed as a replacement for the current set of Safety System Unavailability Performance Indicators specified in the Reactor Oversight Process. The benefit of the Mitigating Systems Performance Index to the NRC, the industry, and other stakeholders is that it provides a more accurate indication of the risks associated with changes in the availability and reliability of important safety systems. Toward that end, the index is based on risk-significant functions and uses plant-specific risk models and Fussell-Vesely importance measures.

During FY 2004, the NRC staff published a report (SECY-04-0053), that documents the lessons learned by implementing the Reactor Oversight Process. Based on that report, the staff intends to continue performing annual self-assessments and to report the results to the Commission each year. In FY 2004, the NRC and the industry continued to develop risk-informed improvements to the Standard Technical Specifications for reactors. In addition, the NRC approved a variety of risk management technical specification initiatives, including: (1) allowances for a risk-informed evaluation to determine whether it is preferable to shut down or to continue to operate a reactor plant under certain degraded conditions, and (2) flexibility in determining the required actions to be taken when certain support equipment is not operable but can still function. The NRC also completed an initial acceptance review of an industry proposal for risk management of allowed outage times for technical specification equipment.



ACTIONS TO ADDRESS THE NRC'S MANAGEMENT CHALLENGES

The NRC continued to implement improvements to the Reactor Oversight Process. Specifically, the agency improved the Significance Determination Process, which is used to assess the safety significance of reactor events and inspection findings. Toward that end, the NRC added two new methodologies to the Significance Determination Process in FY 2004. The first of these methodologies provides NRC inspectors the tools needed to assess the risk significance of identified fire protection issues while the second provides NRC inspectors with the tools needed to assess the risk significance of identified issues that affect plant safety during shutdown.

During FY 2004, consistent with the Commission's policy statements on technical specifications and the use of probabilistic risk assessment, the NRC and the industry continued to develop risk-informed improvements to the current system of technical specifications. These improvements are intended to maintain or improve safety while reducing unnecessary burden and to bring technical specification requirements into congruence with the Commission's other risk-informed regulatory activities. In addition, in February 2004, the NRC issued for trial use Regulatory Guide 1.200 (formerly known as draft Regulatory Guide DG-1122), "An Approach for Determining the Technical Adequacy of PRA Results for Risk-Informed Activities," and the associated Standard Review Plan Chapter 19.1, "Determining the Technical Adequacy of Probabilistic Risk Assessment Results for Risk-Informed Activities." This Regulatory Guide provides guidance to licensees concerning the quality needed for probabilistic risk assessment information used in risk-informed activities. A trial use period was scheduled to test the implementation of the guide through a variety of different risk-informed applications. Based on experience during that trial period, the staff will incorporate lessons learned into a future revision of the regulatory guide, where needed, to improve its efficiency and effectiveness.

During FY 2004, the NRC continued to develop technical information to support possible changes to the agency's emergency core cooling system requirements and acceptance criteria as well as additional guidance concerning how risk analyses should be used in regulatory decision-making. In addition, the NRC staff submitted to the Commission for its approval the final rule amending Title 10, Section 50.69, of the *Code of Federal Regulations* (10 CFR 50.69) to risk-inform the regulations regarding special treatment requirements. Special treatment refers to "extra" requirements that the NRC imposes on structures, systems, and components, which exceed industry-established requirements for equipment that is classified as "commercial grade." The requirements defined in the proposed rule provide additional confidence that the affected equipment can meet its functional requirements under design-basis conditions. Specifically, the rule establishes risk-informed categorization and treatment of structures, systems, and components. In so doing, it allows licensees to request approval to implement alternative

APPENDIX B

requirements for inspection, testing, maintenance, and quality assurance (among other activities), based upon their safety significance. The staff submitted the final rule to the Commission with the issuance of SECY-04-0109, “Final Rulemaking to Add New Section 10 CFR 50.69, ‘Risk-Informed Categorization and Treatment of Structures, Systems, and Components for Nuclear Power Reactors,’” dated June 30, 2004. The NRC staff developed the technical basis for a risk-informed selection of a pressurized thermal shock screening criterion to support a potential risk-informed rulemaking effort. The staff documented that technical basis in a draft report issued on December 31, 2002. The NRC staff continued this effort during FY 2004, and is scheduled to issue the final technical basis report in September 2004.

In FY 2004, the NRC continued to develop risk-informed and performance-based rules. Specifically, the NRC published final rules for 10 CFR 50.44, “Combustible Gas Control for Nuclear Reactors,” and 10 CFR 50.48, “Fire Protection.” The amendment to 10 CFR 50.44 eliminates the requirements for hydrogen recombiners and hydrogen purge systems and relaxes the requirements for hydrogen and oxygen monitoring equipment to make them commensurate with their risk significance. The amendment to 10 CFR 50.48 revises the NRC’s fire protection requirements for nuclear power reactor licensees to permit existing licensees to adopt voluntarily fire protection requirements contained in the National Fire Protection Association (NFPA) Standard 805, “Performance-Based Standard for Fire Protection for Light-Water Reactor Electric Generating Plants, 2001 Edition.” Those NFPA-805 fire protection requirements provide a risk-informed, performance-based alternative to the NRC’s existing deterministic and prescriptive fire protection requirements.

The NRC staff continued its work to improve the requirements contained in 10 CFR 50.46 as they relate to analysis of design-basis large-break loss-of-coolant accidents and associated emergency core cooling performance and analysis. The NRC staff also proceeded with a number of related activities, including developing frequency estimates for loss-of-coolant accidents and working on a proposed rule to allow use of an alternative maximum break size. The rule revisions and associated plant changes will have to meet specified acceptance criteria for risk-informed decisions. These requirements specify the assumptions, methods, and acceptance criteria for use in evaluating the adequacy of the emergency core cooling system for design-basis loss-of-coolant accidents. The development of a risk-informed approach to 10 CFR 50.46 has the potential to improve significantly the effectiveness of regulatory oversight related to emergency core cooling system performance.

The NRC published a summary report and action plan concerning the staff’s efforts to create an environment in which risk-informed methods are integrated into staff activities and in which staff plans and actions are based on the principles of risk-informed regulation.



ACTIONS TO ADDRESS THE NRC'S MANAGEMENT CHALLENGES

Nuclear Materials Safety: Over the past year, the NRC made significant progress toward increasing the use of risk insights and information where feasible and beneficial. Toward that end, the agency is currently developing guidance documents and risk guidelines to facilitate consistent and effective application of the risk-informed approach.

In FY 2004, the NRC completed a feasibility/scoping study to identify human reliability analysis development needs for the wide range of situations encountered and activities performed by licensees in the Nuclear Materials Safety program. The final report on the feasibility study results for byproduct materials applications was completed and delivered in FY 2004. The staff has reviewed this feasibility study report, and management will use the review findings to prioritize human reliability analysis needs in the Nuclear Materials Safety program.

The NRC identified nuclear material safety and safeguards regulatory applications that are amenable to increased use of risk insights and evaluated recommendations to improve the effectiveness and efficiency of the Byproduct Materials Program. The NRC completed staff guidance for the technical assistance request process, revised the event evaluation policy, and promoted licensees' use of the NUREG-1556 series entitled "Byproduct Consolidated Guidance About Materials Licenses." The staff also incorporated other recommendations into Materials Inspection Manual Chapter 2800, entitled "Materials Inspection Program."

The NRC staff reviewed and revised all inspection procedures in 10 CFR Part 70, which increases the use of risk information in regulating fuel cycle facilities. Specifically, the staff updated these inspection procedures to determine applicability, eliminate duplication of effort, incorporate risk-informed and performance-based approaches, and ensure compatibility with the revised regulations in 10 CFR Part 70. As part of this effort, the staff reviewed integrated safety analysis (ISA) summaries, which represent one aspect of the NRC's implementation of the revised regulations, for individual fuel facility license amendment requests. In addition, the staff began to implement the revised Fuel Cycle Oversight Program, which focuses on risk-informed regulations associated with 10 CFR Part 70. This program includes risk-informed inspections, evaluation of the risk significance of facility events and inspection findings, more effective and predictable enforcement and assessment of licensee performance, and enhanced communication with stakeholders.

The NRC continues to incorporate lessons learned into guidance development in order to enable the agency to apply risk-informed approaches consistently and effectively where appropriate. For example, during FY 2004, the staff conducted two pilot studies to test a proposed systematic risk-informed approach to further the agency's goals of improving the focus on safety, efficiency, and effectiveness.

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Nuclear Waste Safety: In FY 2004, the NRC continued work on a probabilistic risk assessment of a dry cask storage system. This probabilistic risk assessment study provides a method for quantifying the risks of dry cask storage of spent nuclear fuel and provides insights for improved decision-making concerning regulatory activities associated with 10 CFR Part 72.

Also during FY 2004, the final rule amending the licensing requirements in Part 72 became effective for dry storage of spent nuclear fuel, high-level radioactive waste, and power reactor waste greater than Class C in an independent spent fuel storage installation or a retrievable storage installation monitored by the Department of Energy. Specifically, the final rule allows certain license applicants to use a design earthquake level commensurate with the risk associated with their independent spent fuel storage or monitored retrievable storage installations.

Furthermore, the staff completed the predecisional draft of the Risk-Insights Baseline Report for the High-Level Waste Program. In so doing, the staff used the risk insights to focus the independent assessments on the more risk-significant issues associated with the Department of Energy's pre-licensing program. The staff increased the use of risk information in the issue resolution process by explicitly considering the risk insights in the review of the Department of Energy's agreement submittals. In addition, the NRC received Version 5.0 of the Total-System Performance Assessment computer code from the Center for Nuclear Waste Regulatory Analysis. The Total-System Performance Assessment code is the staff's primary tool for generating risk information and insights related to post-close repository performance.

In FY 2004, the NRC staff completed initial follow-on activities associated with the FY 2003 evaluation of issues impacting the implementation of the Subpart E of 10 CFR Part 20 (the License Termination rule) and the decommissioning program evaluation. To address the issues identified in the License Termination rule analysis, the staff developed a regulatory issues summary to inform licensees and stakeholders of the options available for use in resolving the license termination issues as well as plans for future actions (including guidance and rulemaking) and plans to risk-inform further the implementation of the License Termination rule.

The NRC completed a feasibility/scoping study to identify human reliability analysis development needs for the wide range of situations encountered and activities performed by licensees in the Nuclear Waste Safety arena. The draft report on the feasibility study results for waste applications was completed and delivered in FY 2004. The staff has reviewed this feasibility study report, and management will use the review findings to prioritize human reliability analysis needs in the Nuclear Waste Safety program.



ACTIONS TO ADDRESS THE NRC'S MANAGEMENT CHALLENGES

The NRC staff drafted an integrated plan to identify actions and activities that address the programmatic issues identified in the FY 2003 decommissioning program evaluation. In a related followup activity, the staff drafted a prioritization scheme to ensure that the agency focuses its resources on those sites that pose the greatest risk or where delaying decommissioning may have some other adverse impact.

ABILITY TO MODIFY REGULATORY PROCESSES TO MEET CHANGING EXTERNAL DEMANDS

The NRC uses its Planning, Budgeting, and Performance Management process to integrate the agency's regulatory processes and ensure that the agency is able to respond to changes in its environment. Each year, the Program Review Committee holds planning sessions to ensure that the Commission's regulatory processes are integrated and resources allocated where needed. The Commission approves these plans during the budget process. In addition, the Executive Director for Operations holds meetings to ensure integration across NRC programs.

The NRC issues regulations that are considered necessary to ensure that licensees operate their reactor facilities in a safe manner and that the agency meets its strategic goal to protect public health and safety. Any rule imposing requirements needs a backfit analysis (in accordance with the Backfit rule set forth in 10 CFR 50.109) justifying that the requirements either are necessary for adequate protection or are cost-beneficial safety enhancements. Completed regulatory actions reflecting this position during FY 2004 included Performance-Based Risk-Informed Fire Protection and Risk-Informed 50.44 Rulemaking.

Quarterly meetings of the Probabilistic Risk Assessment Steering Committee ensure that risk-informed activities are integrated across the agency. Similarly, the participation of NRC managers on the Research Effectiveness Review Board ensures that the agency's research program effectively meets agencywide needs.

The NRC relies on a Risk Steering Committee, which provides guidance and sets expectations for implementing risk-informed initiatives in the Nuclear Materials and Waste Safety programs. The committee comprises agency experts who offer guidance in risk-informing initiatives. These experts also provide peer review of risk-informed products.

The NRC and representatives from the Nuclear Engineering Institute hold periodic Fire Protection Issues Management Meetings. These meetings provide a forum through which the NRC and the industry identify and prioritize emerging fire protection issues, and develop approaches for issue resolution.

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The NRC's Rulemaking Coordinating Committee, established in 1998, ensures that the agency's rulemaking process remains consistent throughout the NRC. The primary focus of the Rulemaking Coordinating Committee is to ensure consistency in methods used to develop and promulgate rules and to facilitate initiatives for improving all aspects of the rulemaking process.

The staff continued to prepare for receipt of the Department of Energy's anticipated high-level waste repository license application and the associated hearings. This cooperative effort involves putting the systems and processes in place to fulfill the 3-year mandate.

ACQUISITION AND IMPLEMENTATION OF INFORMATION RESOURCES

The NRC's actions to address this management challenge in FY 2004 are discussed in detail in the section of Chapter 2 related to the President's Management Agenda. Please see the discussion concerning "Expanded Electronic Government under the Federal Information Security Management Act."

ADMINISTRATION OF ALL ASPECTS OF FINANCIAL MANAGEMENT

The NRC's actions to address this management challenge in FY 2004 are discussed in detail in the section of Chapter 2 related to the President's Management Agenda. Please see the discussion concerning "Improved Financial Management."

COMMUNICATION WITH EXTERNAL STAKEHOLDERS THROUGHOUT NRC REGULATORY ACTIVITIES

The NRC issued guidelines for effectively communicating risk-related information to external stakeholders ("Effective Risk Communications," NUREG/BR0308, dated January 2004). The document provides easy-to-use guidance for agency staff and management concerning NRC-specific communication topics and situations that deal with risk to ensure the agency's openness with the public. The guidance contains practical suggestions, tailored to the NRC's needs, that reflect the risk communication best practices learned from researchers, trainers, and practitioners from numerous Federal, State, private, and educational organizations.

Nuclear Reactor Safety: The NRC developed and implemented an array of plans governing communications concerning topics such the recent events at the Davis-Besse Nuclear Power Station and the Vermont Yankee Generating Station, fire protection, and Generic Safety Issue 191, "Assessment of Debris Accumulation on Pressurized-Water Reactor Sump Performance."



ACTIONS TO ADDRESS THE NRC'S MANAGEMENT CHALLENGES

As of the third quarter of FY 2004, the NRC's license renewal program staff has conducted 20 public meetings concerning the NRC's license renewal application review process, environmental issues, and public outreach associated with the continued operation of nuclear power plants. The targeted goal for FY 2004 is three scheduled public outreach meetings, and the staff is on schedule to meet this goal by the end of FY 2004. These meetings afforded the NRC the opportunity to solicit stakeholder viewpoints. They also allowed a meaningful exchange of information with external stakeholders concerning the potential environmental effects of continued operation, the license renewal process, and opportunities for public involvement. The NRC held these meetings in the vicinity of those affected by the actions to be discussed.

As of the second quarter of FY 2004, the NRC staff has held five public outreach meetings concerning issues surrounding the reactor vessel head degradation at the Davis-Besse Nuclear Power Station and the NRC's related response and evaluation. These meetings informed external stakeholders about the status of the NRC's oversight activities as well as the Davis-Besse restart activities and gave citizens the opportunity to comment and ask questions.

The NRC also held a public meeting in the vicinity of the Vermont Yankee Nuclear Generating Station to discuss the NRC's power uprate review process and to receive feedback from the public. In addition, the NRC held public meetings in the vicinity of each nuclear power plant during FY 2004 to discuss the NRC's annual assessment of each plant's safety performance. These meetings provided external stakeholders information on each plant's safety performance and the NRC's role in ensuring safe operation. In September and October 2003, the NRC received three early site permit applications for the Clinton, North Anna, and Grand Gulf sites. The staff's review of these applications will continue throughout FY 2004 and FY 2005, ending in FY 2006. As of the third quarter of FY 2004, the NRC has held all three of the scheduled public meetings to inform the respective communities of the NRC's regulatory role and the process for evaluating early site permit applications.

Nuclear Materials Safety: During FY 2004, the NRC coordinated with the Department of Energy on several projects. In particular, these projects included the mixed-oxide fuel fabrication facility, the potential for NRC (external) regulation of the Department of Energy's non-defense laboratories, and issues related to gas centrifuge uranium enrichment.

As of May 31, 2004, the NRC's fuel cycle facilities licensing and inspection program staff has conducted 15 public meetings concerning significant regulatory issues. These meetings gave the NRC the opportunity to solicit stakeholder viewpoints and provided stakeholders the opportunity to exchange information on a variety of issues including the gas centrifuge and

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mixed-oxide fuel fabrication facility licensing initiatives. Most of these meetings took place in the vicinity of those affected by the respective actions.

In December 2003, the NRC issued for public comment a proposed rule to amend the agency's requirements for training and experience, as set forth in 10 CFR Part 35, "Medical Use of Byproduct Material." The NRC staff developed the proposed rule with input from professional speciality boards and other members of the public as well as the NRC's Advisory Committee on the Medical Uses of Isotopes. The NRC staff also worked closely with the States to ensure a cooperative dialogue concerning the regulation of radioactive material. In addition, NRC staff representatives participated in the Organization of Agreement States meetings in October 2003 and September 2004, as well as the Conference of Radiation Control Program Directors meeting in May 2004. At these meetings, the staff representatives reported on the status of rulemakings, implementation of 10 CFR Part 35, and the various working groups in which States participate and have special interest. In addition, the staff made several "poster" presentations.

In FY 2004, the NRC staff developed a generic communication plan for rulemakings. The primary goal of this plan is to ensure that the NRC conveys a consistent message to all internal and external stakeholders.

In addition, the NRC maintains a public Web site to facilitate communication with stakeholders. This site provides a variety of links to pertinent documents, updates on current activities, and information on opportunities for stakeholder input.

Nuclear Waste Safety: During FY 2004, NRC representatives met with elected officials, members of the public, and other representatives from the State of Nevada and several counties to address health and safety issues associated with a possible licensing decision concerning the proposed high-level waste repository at Yucca Mountain. The NRC representatives also provided an overview of the agency's role in the potential licensing of the repository at several public outreach meetings in Nevada. Examples of public meetings to communicate the NRC's role in the potential licensing of the proposed Yucca Mountain high-level waste repository included an open house meeting, a workshop for tribal representatives on the licensing process and technical issues associated with the proposed repository, and a presentation to the National Conference of State Legislatures High Level Waste Working Group.

The NRC conducted more than 30 public workshops, conferences, and "town hall" meetings with interested stakeholders, including Federal, State, and local elected officials; international bodies; the nuclear industry; and public interest groups to address the public's growing interest in the safety of spent fuel storage and transportation. The NRC and the Department of



ACTIONS TO ADDRESS THE NRC'S MANAGEMENT CHALLENGES

Transportation conducted joint public meetings to seek input and inform national positions prior to significant meetings of the International Atomic Energy Agency concerning international transport regulations. The NRC updated and continued to implement the communications plans for the Package Performance Study and spent fuel transportation, which provide a focused approach for public outreach and communication related to spent fuel transportation.

The NRC conducted several public meetings with interested stakeholders concerning various sites or projects undergoing environmental review or scoping processes, including the West Valley Demonstration Project and controlling the disposition of solid materials.

The NRC held numerous public meetings and more than 15 technical meetings with licensees (which were also open to the public) to discuss issues regarding sites undergoing decommissioning, including the Mallinkrodt; Jefferson Proving Ground; AAR Manufacturing, Inc.; SCA Services, Inc.; and Tobico Marsh materials sites as well as the Yankee Rowe power reactor site. In addition, the staff developed communications plans for power reactors undergoing decommissioning.

The NRC maintains a public Web site to facilitate communication with stakeholders. This site provides a variety of links to pertinent documents, updates on current activities, and information on opportunities for stakeholder input. In FY 2004, the staff augmented the site by adding semiannual reports related to the rulemaking for controlling the disposition of solid material, as well as notices and links to NUREG/CR-6682, "Summary and Categorization of Public Comments on Controlling the Disposition of Solid Materials." The staff added the March 2004 Scoping Summary Report on controlling the disposition of solid material, which contains a concise summary of the public comments received in regard to the scope of the generic environmental impact statement as well as the alternatives and environmental impacts that the generic environmental impact statement should address.

INTERAGENCY COMMUNICATION (UP, DOWN, AND ACROSS ORGANIZATIONAL LINES)

The NRC staff routinely develops communications plan to emphasize important topics that need to be communicated both internally and externally. Talking points and briefing papers are developed on major activities to ensure consistency in key messages. The agency has also emphasized efficient meeting policies, promoted team-building, and supported intra-office efforts to share important information across the agency.

The NRC continues to update and improve methods for meeting the information needs of employees. Announcements have been streamlined, and values are emphasized. Individual

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offices will continue developing and updating their own individual Web pages linked to the agency's internal home page.

The NRC is establishing a Communications Council, which will plan, coordinate, and implement the agency's internal communication strategies and share best practices that will add value across the agency.

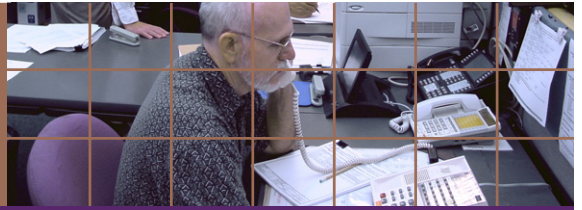
Internal NRC communications have increased, and a growing number of offices periodically issue internal electronic newsletters. The agency has developed "EDO updates" through which the Executive Director for Operations regularly communicates important information to all agency staff, and the agency frequently issues staff memoranda concerning a variety of internal communication subjects. In addition, several individual offices have undergone detailed internal communication studies. These activities have included administering surveys, holding focus groups, and creating methods for collecting internal feedback.

The NRC regularly emphasizes good communication practices for use by agency managers. These practices include face-to-face communications, frequent feedback, and two-way communications. New leadership courses will also emphasize these practices and stress coaching and team-building. In addition, many offices have created their own communication-related positions or teams tasked with addressing stakeholder concerns, fostering good internal and external communication practices, and addressing related policy matters.

The NRC is reinforcing the agency's safety mission through e-mail messages, messages on the internal Web page, posters, memoranda, and other media. The agency is asking managers to emphasize that all performance goals support safety because they allow the NRC and its licensees to focus attention on those activities that are most important to safety. Agency managers will reinforce the linkage between the NRC's daily activities and the agency's safety mission.

The offices involved in the Nuclear Reactor Safety program met periodically with intra-agency stakeholders to enhance communication and support functions. Offices in this program also identified internal stakeholders as a target audience in their communications plans.

In addition, the Office of Nuclear Reactor Regulation developed communications plan for nuclear reactor regulation to support achievement of the agency's mission by providing tools, processes, and guidance to improve internal and external communication. The office will continue to propose and develop new and expanded communication efforts to encourage internal sharing of ideas; improve the flow of information among staff and management; and improve the timeliness, accuracy, and clarity of both internal and external communications.



ACTIONS TO ADDRESS THE NRC'S MANAGEMENT CHALLENGES

During FY 2004, the NRC continued to improve the interfaces among its component offices through periodic meetings to enhance integration and cooperation. Communication between headquarters and regional offices continued to improve as a result of frequent conference calls at both the staff and senior management levels as well as trips, weekly informational e-mail messages, and the effective use of internal Web pages. The offices also continued to rotate staff and management assignments throughout the organization to increase team-building.

Communication between the Office of Nuclear Reactor Regulation and the agency's other program and support offices is improving as a result of agencywide support of the monthly Communication Council meetings. These meetings encourage sharing of best practices and lessons learned that add value across the agency. In addition, routine interactions with the NRC's new Director of Communications assist the staff in defining, implementing, and continually improving communications.

Examples of communication-related efforts undertaken by the Office of Nuclear Materials Safety and Safeguards include training meetings with regional office staff concerning the revisions to 10 CFR Part 71 continuation of an active program for inter- and intraoffice rotational assignments; semi-annual meetings with the Office of Nuclear Regulatory Research to review the status of ongoing research projects; monthly Decommissioning Management Board meetings to enhance communication concerning decommissioning program activities and semiannual headquarters/regional counterpart meetings to discuss programmatic and technical issues in a focused, structured manner; and biweekly conference calls with the regions and other internal stakeholders.

MANAGING HUMAN CAPITAL

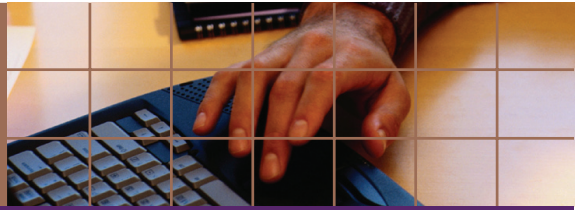
The NRC's actions to address this management challenge in FY 2004 are discussed in detail in the section of Chapter 2 related to the President's Management Agenda. Please see the discussion concerning "Strategic Management of Human Capital."

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MANAGEMENT DECISIONS AND FINAL ACTIONS ON OIG AUDIT RECOMMENDATIONS

The agency has established and continues to maintain an excellent record in resolving and implementing audit recommendations presented in OIG reports. Section 5(b) of the Inspector General Act of 1978, as amended, requires agencies to report on final actions taken on OIG audit recommendations. The following table gives the dollar value of disallowed costs determined through contract audits conducted by the Defense Contract Audit Agency and NRC's Office of the Inspector General. Because of the sensitivity of contractual negotiations, details of these contract audits are not furnished as part of this report. As of September 30, 2004, there were no outstanding audits recommending that funds be put to better use.

MANAGEMENT REPORT ON OFFICE OF THE INSPECTOR GENERAL AUDITS WITH DISALLOWED COSTS <i>For the period October 1, 2003-September 30, 2004</i>			
CATEGORY	NUMBER OF AUDIT REPORTS	QUESTIONED COSTS	UNSUPPORTED COSTS
1. Audit reports with management decisions on which final action had not been taken at the beginning of this reporting period.	0	0	0
2. Audit reports on which management decisions were made during this period.	1	\$109,191	0
3. Audit reports on which final action was taken during this report period.			
(i) Disallowed costs that were recovered by management through collection, offset, property in lieu of cash, or otherwise.	1	\$109,191	0
(ii) Disallowed costs that were written off by management.	0	0	0
4. Reports for which no final action had been taken by the end of the reporting period.	0	0	0



MANAGEMENT DECISIONS AND FINAL ACTIONS ON OIG AUDIT RECOMMENDATIONS

MANAGEMENT DECISIONS NOT IMPLEMENTED WITHIN ONE YEAR

Management decisions were made before September 2003 for the OIG audit reports discussed in the following paragraphs. As of September 30, 2004, NRC did not take final action on some issues. However, the OIG did not recommend that funds be otherwise allocated.

NRC'S LICENSE FEE DEVELOPMENT PROCESS NEEDS IMPROVEMENT (OIG/99A-01)

December 14, 1999

The OIG recommended that the methodology for calculating the hourly rates for license fees be reevaluated to include the full-cost concept as embodied in OMB Circular No. A-25, *User Charges*, and Statement of Federal Financial Accounting Standards (SFFAS) No. 4, *Managerial Cost Accounting Standards*, and that actual cost data be used to refine future rate calculations. NRC implemented a cost accounting system in FY 2002, and cost data from this system was used as input to review the existing full-cost rate, including identification and assignment of direct and allocated indirect costs. In November 2003, NRC obtained contractor assistance to provide recommendations for improving NRC's license fee development process, including through the use of actual cost data to refine hourly rate calculations. The contractor delivered its recommendations in August 2004 and NRC is analyzing these recommended changes. NRC is considering issuing an Advance Notice of Proposed Rulemaking in the Spring of 2005 to obtain public comments on the new fee calculation process. Upon consideration of the comments, NRC may, as warranted, incorporate the recommended changes into its FY 2006 fee rule. NRC intends to issue the proposed FY 2006 fee rule early in 2006 and the final fee rule mid-2006. Issuance of this rule using actual cost data to establish hourly rates will complete agency action on the OIG's recommendations from this audit.

REVIEW OF AUDIT FOLLOW-UP SYSTEM (OIG-00-A-05)

August 14, 2000

The OIG recommended that NRC revise the Management Directive and Handbook 6.1, *Resolution and Follow-up of Audit Recommendations*, governing resolution and follow-up of audits to reflect periodic scheduling standards for conducting analyses of audit recommendations to determine possible trends and systemwide problems and solutions, as required by Office of Management and Budget Circular A-50. In addition, the OIG recommended that NRC assess its scheduling requirements for conducting audit follow-up reviews with the objective of conducting them on a consistent frequency. NRC is developing a major revision of the

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management directive and handbook, which will incorporate these recommendations. The schedule for completion of the revision to the management directive and handbook, which are also being revised to address the recommendations of OIG-00-E-09, is provided under the paragraph in this section, entitled “Special Evaluation of the Role and Structure of NRC’s Executive Council (OIG-00-E-09).” Issuance of the revised management directive and handbook will complete agency actions on the OIG’s recommendations from this audit.

SPECIAL EVALUATION OF THE ROLE AND STRUCTURE OF NRC’S EXECUTIVE COUNCIL (OIG-00-E-09)

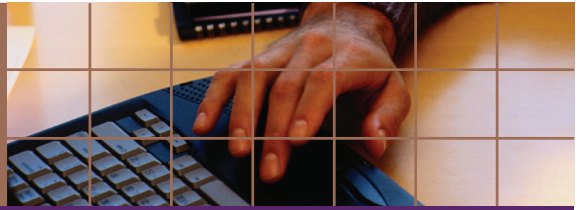
August 31, 2000

The OIG recommended that NRC’s management directives and communication mechanisms be updated to reflect the responsibilities and alignment of the Executive Director for Operations (EDO), the Chief Financial Officer (CFO), and the Chief Information Officer (CIO) after the Commission decided on a management strategy for NRC’s Executive Council. In January 2001, the Commission announced the abolishment of the Executive Council, although the EDO, CFO, and CIO continue to meet periodically to ensure necessary communications. Of the 32 management directives reviewed for possible revision to reflect the elimination of the Executive Council and the realignment of the responsibilities of the EDO, CFO, and CIO, revision and issuance of three remain to be completed. One management directive is awaiting the Chairman’s approval for issuance and the remaining two are in various stages of development, review, and concurrence and are expected to be issued during FY 2005. The delay in completing these revisions is attributable in large part to the need for general updating of the management directives, as well as revising them to reflect the elimination of the Executive Council. Issuance of the three remaining management directives will complete agency actions on the OIG’s recommendations from this audit.

THE NATIONAL MATERIALS PROGRAM STEERING COMMITTEE (OIG-01-A-01)

December 14, 2000

The OIG recommended that NRC establish a requirement in the management directives that agency steering committees formally define their roles and responsibilities. Interim guidance has been drafted and is being coordinated agencywide with planned issuance by the end of 2004. The interim guidance will be posted on the NRC internal Web site, and will be established as requirements via a management directive that is currently undergoing revision, and planned for issuance in FY 2005. Issuance of this guidance will complete agency actions on the OIG’s recommendations from this audit.



MANAGEMENT DECISIONS AND FINAL ACTIONS ON OIG AUDIT RECOMMENDATIONS

REVIEW OF NRC'S QUALITY ASSURANCE PROCESS FOR OFFICIAL DOCUMENTS (OIG-01-A-02)

February 23, 2001

The OIG recommended that NRC improve its quality assurance process for official documents by revising Management Directive and Handbook 3.57, *Correspondence Management*, to provide clear expectations for NRC staff to heighten awareness of the importance of information accuracy. Specifically, the OIG recommended that NRC establish the responsibilities of the document originator and concurrence chain reviewers with regard to accuracy of final products and to set expectations for document originators concerning fact-checking methods. Interim policy guidance on ensuring the technical accuracy and readability of NRC's documents and correspondence was issued to all NRC employees in May 2001. A revision of the management directive and handbook, incorporating this policy and other needed updates, is expected to be issued in June 2005, which will complete agency actions on the OIG's recommendations from this audit.

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

February 23, 2001

The OIG recommended that NRC develop the management control procedures needed to produce valid and reliable performance data, including guidance on reporting unmet goals. Interim guidance for performance management and reporting performance information was issued in July 2001. In July 2002, a new Management Directive and Handbook 4.8, *Performance Measurements*, was issued for intraagency review and comment. The new management directive and handbook are in final review and are expected to be published in 2005. Issuance of this management directive and handbook will complete agency actions on the OIG's recommendations from this audit.

REVIEW OF NRC'S ACCOUNTABILITY AND CONTROL OF SOFTWARE (OIG-02-A-02)

November 6, 2001

The OIG recommended that NRC incorporate the requirements of Executive Order 13103, *Computer Software Piracy*, and the provisions of the August 1999 guidance issued by the CIO Council (CIOC) into NRC's Management Directive System. The requirements of the Executive Order and the provisions of the CIOC's guidance have been incorporated into a new Management

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Directive 2.6, *Information Technology Infrastructure*, which is expected to be approved for issuance in early FY 2005. Issuance of this management directive will complete agency actions on the OIG's recommendations from this audit.

REVIEW OF THE AGENCYWIDE DOCUMENTS ACCESS AND MANAGEMENT SYSTEM (OIG-02-A-12)

June 12, 2002

The OIG recommended that NRC finalize and issue its draft new management directive and handbook addressing the agency's systems development life-cycle management (SDLCM) methodology. In early FY 2003, NRC conducted a lessons-learned analysis to identify changes to improve the SDLCM methodology's effectiveness and usability. Feedback from this analysis resulted in major process revisions, which were documented in the drafts of the new Management Directive 2.5, *Application Systems Life-Cycle Methodology*, and the new Handbook 2.5, *Systems Development and Life-Cycle Management Methodology*. The new management directive and handbook are expected to be issued by November 2004. Pending issuance, the final drafts are available on the internal NRC Web site. Issuance of the management directive and handbook will complete agency actions on the OIG's recommendations from this audit.

REVIEW OF SECURITY AT NRC HEADQUARTERS (OIG-02-A-14)

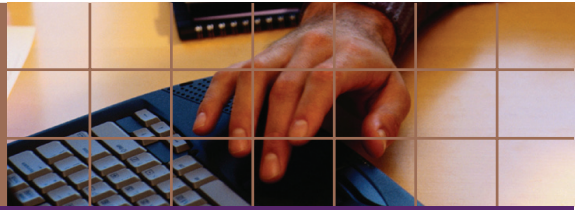
August 15, 2002

Due to the sensitive nature of the OIG's review and recommendations in this area, specific details are not furnished as part of this report. Completion of open recommendations has been delayed due to an increase in scope, including the acquisition of an adjacent lot as the primary entry and exit path to the NRC Headquarters office complex, and due to the approvals required to make changes to the perimeter of the complex. Completion of corrective actions on recommendations remaining open as of September 30, 2004, are expected to be completed by the end of FY 2005, which will complete agency actions on the OIG's recommendations from this audit.

REVIEW OF NRC'S SIGNIFICANCE DETERMINATION PROCESS (OIG-02-A-15)

August 29, 2002

The OIG recommended various refinements to help ensure the successful implementation of NRC's Significance Determination Process (SDP), which is a series of analytical steps NRC



MANAGEMENT DECISIONS AND FINAL ACTIONS ON OIG AUDIT RECOMMENDATIONS

uses to evaluate inspection findings under the oversight process for commercial nuclear power plants. Several recommendations from this audit remain open. The open recommendations, agency actions required to address these recommendations, and projected completion dates for agency actions are as follows:

- (1) OIG recommended that NRC either develop an action plan to correct weaknesses in the SDP Phase 2 analysis, a process which is intended to enable NRC inspection staff to characterize the risk associated with more significant inspection issues in the reactor safety performance area, or eliminate the Phase 2 analysis. The weaknesses identified by OIG include use of incomplete licensee risk assessments, the generally conservative results that Phase 2 analysis produces, and the infrequent use of Phase 2 analysis by NRC inspectors. NRC issued a task action plan in March 2002 with various activities to improve the overall effectiveness of the SDP, including tasks that extend beyond OIG's recommendation. The OIG's findings will be addressed by ongoing work to develop enhanced pre-solved SDP tables. The Phase 2 notebooks have been benchmarked against licensee risk models, although notebooks benchmarked during the early stages of the process need to be revised to incorporate lessons learned during the latter stages of the review. This work will be completed by the end of FY 2005.
- (2) OIG recommended that NRC develop and implement guidance for using licensee PRAs in SDP evaluations. Such guidance would enable NRC analysts to determine that licensees have performed sufficiently comprehensive and acceptable PRA analyses, thereby providing assurance that SDP risk evaluations are providing a sound basis for regulatory decisions. The staff has completed improvement to SDPs for findings related to shutdown risk, fire protection, containment risk, and steam generator tube integrity. Still ongoing are development of SDPs for findings related to the maintenance rule and ex-core spent fuel, and continuation of the Risk Assessment Standardization Project (RASP). During FY 2004, the staff also conducted an inspector training requirement review and concluded that the existing SDP training was adequate. However, OIG has requested further information and review prior to closing this item. Although considerable progress was made during FY 2004, the ongoing activities are not expected to be completed until January 2005.
- (3) OIG recommended that NRC develop and implement guidance for providing independent assurance of the quality of licensee risk information used to support SDP decisions. Draft Regulatory Guide DG-1122, *Determining the Technical Adequacy of PRA Results for Risk-Informed Activities*, was developed to provide guidance on an acceptable approach to determine the quality of probabilistic risk assessment (PRA) results that may be used to support reactor oversight process (ROP) decision making. As part of its RASP, NRC is

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pursuing development of implementing procedures for the agency's risk analysts that uses the approach in DG-1122 for evaluating the quality of PRA information submitted by licensees. It is anticipated that the RASP procedures will provide for consistent and independent evaluations of inspection findings, which in turn will allow more effective evaluations of the quality of licensee PRA information. The objective and schedules for this initiative will be finalized in January 2005.

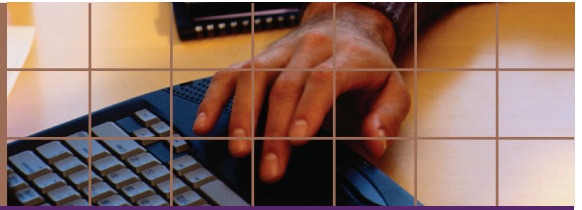
- (4) OIG recommended that NRC establish a mechanism for agency managers to resolve identified delays. NRC issued the SDP Active Issues Matrix in August 2002 and it is being updated monthly to reflect the current listing of active and completed SDP reviews. It is distributed to appropriate NRC managers and staff and is also available (in the Agencywide Documents Access and Management System) for other interested agency personnel. Since implementation of this report, there has been an improvement in the timeliness of SDP activities, i.e., the percentage of issues completed within the agency's 90-day goal has improved from approximately 60 percent in FY 2002 to approximately 80 percent in FY 2004. NRC intends to continue to monitor the improvement trend in SDP timeliness and provide management attention where needed to ensure delays are minimized. NRC expects to monitor the trend through January 2006 before considering actions on this OIG recommendation to be complete.

Completion of the activities described above will complete agency action on the OIG's recommendations from this audit.

INDEPENDENT EVALUATION OF NRC'S INFORMATION SECURITY PROGRAM AS REQUIRED BY THE GOVERNMENT INFORMATION SECURITY REFORM ACT FOR FY 2002 (OIG-02-A-17)

September 11, 2002

Due to the sensitive nature of the OIG's review and recommendations in this area, specific details are not furnished as part of this report. As of September 30, 2004, completion of agency actions on this OIG audit report requires the issuance of two NRC management directives and handbooks, which are expected to be completed by May 2005. These agency actions will be carried over to and tracked to completion via NRC's FY 2005 Plan of Action and Milestones required by the Federal Information Security Management Act.



MANAGEMENT DECISIONS AND FINAL ACTIONS ON OIG AUDIT RECOMMENDATIONS

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

October 25, 2002

The OIG recommended that NRC revise the management directive and handbook governing the sensitive, unclassified information security program and mandate consistent use of markings. During FY 2004, the EDO sponsored an interoffice task force review of all internally and externally generated categories of sensitive, unclassified information, with the exception of safeguards information. The review focused on identifying where clarification may be appropriate in the requirements for marking, storage, access, transmission, reproduction, record keeping, and destruction of such information. The task force report and recommendations are being finalized and will be an input to the revision of the management directive and handbook, the final versions of which are expected to be issued by the end of FY 2005. Issuance of these revised documents will complete agency actions on the OIG's recommendations from this audit.

HEADQUARTERS ACTION NEEDED ON ISSUES IDENTIFIED FROM REGIONAL AUDITS (OIG-03-A-10)

March 14, 2003

The OIG recommended that NRC develop a standard procedure to ensure each region has a consistent understanding of the nature, purpose, and data needed to support each metric reported in the regional operating plans and to determine which administrative metrics should be included in those plans. Guidance on development of operating plans is typically issued to the NRC offices and the regions early each fiscal year. Many activities that occurred during FY 2004 impact the structure and content of future operating plans, the most notable being the issuance in August 2004 of the NRC Strategic Plan for FY 2004-FY 2009. Guidance for FY 2005 operating plans was issued in October 2004. This guidance contains administrative metrics which are to be tracked and reported on by NRC offices and regions. Also in October 2004, draft guidance for the offices and regions on developing, monitoring, and reporting of metrics, which essentially reflects the practices already used by the program offices, was issued to the offices reporting to the EDO and the regions for comment. These efforts will standardize regional operating plans and the administrative metrics contained therein to the extent necessary. Final guidance on metrics will be issued by the end of 2004, completing agency actions on the OIG's recommendations from this audit.

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USE OF ELECTRONIC MAIL AT NRC (OIG-03-A-11)

March 21, 2003

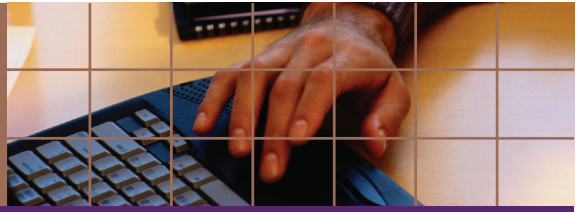
The OIG recommended that NRC revise Management Directive and Handbook 3.53, *NRC Records Management Program*, to include current information about the Agencywide Documents Access and Management System (ADAMS), finalize and implement guidance identifying office responsibilities for records management, develop and require records management training for Records Liaison Officers (RLOs), and develop and offer records management training for NRC staff. Interim guidance on managing electronic records is available on the internal NRC Web site. Records Management Guideline (RMG) No. 04-01, "Responsibilities for Records Liaison Officers (RLOs) in the ADAMS Environment," was issued on March 30, 2004. Additional guidance was provided to NRC offices in a memorandum from the CIO dated August 27, 2004. The revised management directive and handbook have been developed, are undergoing interoffice review, and are expected to be issued by the end of FY 2005. A records management training course (offered as both a web-based and instructor-led course) is being developed for RLOs and other NRC staff. A pilot of the course was offered in September 2004. Changes to the course are being made based on the results of the pilot and the course is expected to be made available to the staff in early FY 2005. The instructor-led course for RLOs will be available in FY 2005. RLOs will be required to complete the training within 6 months after it becomes available. These activities will complete the agency actions on the recommendations contained in the OIG's audit report.

NRC'S ACCOUNTABILITY FOR SPECIAL NUCLEAR MATERIALS (OIG-03-A-15)

June 3, 2003

The OIG recommended several changes to strengthen NRC's oversight program for ensuring that licensees appropriately control and account for special nuclear material (SNM). The open recommendations, the agency actions required to address these recommendations, and projected completion dates for agency actions are as follows:

- (1) OIG recommended that NRC conduct periodic inspections to verify that material licensees comply with material control and accounting (MC&A) requirements, including but not limited to visual inspections of licensees' SNM inventories and validation of report information. NRC will implement inspection program changes as warranted, depending on the outcome of the ongoing MC&A program review, the high-risk source control review, and guidance from the Commission. The program review and report were completed in



MANAGEMENT DECISIONS AND FINAL ACTIONS ON OIG AUDIT RECOMMENDATIONS

September 2004. By March 2005, NRC staff will forward recommendations for program changes to the Commission. Following receipt of Commission guidance, the staff will begin to implement recommendations endorsed by the Commission. In the interim, a temporary instruction (TI) has been developed to govern NRC verification of selected licensee responses to NRC Bulletin 2003-04¹ regarding inventories of source material and SNM tracked in the Nuclear Materials Management and Safeguards System (NMMSS). Limited pilot inspections were conducted during the Summer of 2004 to determine the validity of the instructions in the TI. Training on the TI for regional inspectors was provided during September 2004, and the regions will commence conducting inspections according to the TI in FY 2005. NRC actions to address this OIG recommendation may not be completed until late FY 2005 or early FY 2006, depending on the type and extent of inspection program changes recommended (if any) and whether the Commission endorses the staff's recommendations.

- (2) OIG recommended that NRC staff report annually to the Commission on the effectiveness of NRC's inspection program for ensuring that licensees satisfactorily carry out their MC&A responsibilities. Performance measures have been drafted and are expected to be incorporated into the FY 2005 operating plan. Performance will be evaluated monthly and quarterly. MC&A inspection program highlights of interest will be provided to the Commission during an annual program review, expected to occur in the second quarter of FY 2005. These activities will complete NRC actions under this OIG recommendation.
- (3) OIG recommended that NRC document the basis of the approach used to risk-inform NRC's oversight of MC&A activities for all types of materials licensees. The ongoing MC&A program review will provide historical background on NRC's risk-informed approach to MC&A oversight, and will document the bases for any recommended changes, including justification for recommendations that are risk-informed. The program review and report were completed in September 2004. By March 2005, NRC staff will forward recommendations for changes to the Commission. Issuance of the program review report and the recommendations to the Commission will complete NRC actions under this OIG recommendation.
- (4) OIG recommended that NRC revise its regulations to require licensees authorized to possess SNM, and not currently required to do so, to conduct annual inventories and submit an

¹ NRC Bulletin 2003-04, "Rebaselining of Data in the Nuclear Materials Management and Safeguards System," October 8, 2003.

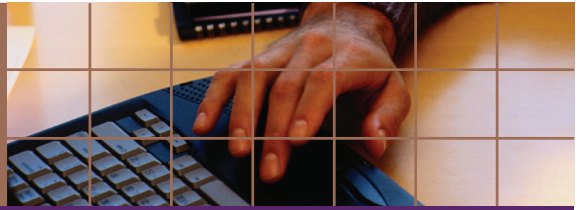
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annual Material Status Report or Physical Inventory Summary Report to NRC. The ongoing MC&A program review is addressing this element of the MC&A program. The program review and report were completed in September 2004. By March 2005, NRC staff will forward recommendations for program changes to the Commission. Following receipt of Commission guidance, the staff will begin to implement recommendations endorsed by the Commission. NRC actions to address this OIG recommendation may not be completed until the end of FY 2006, depending on whether rulemaking is recommended and endorsed by the Commission.

- (5) OIG recommended that NRC establish an independent system of accounting for SNM possessed by NRC and Agreement State licensees and ensure that beginning balances are accurate based on NRC's physical verification of a statistical sample of the location and amounts of SNM held by the licensees, a review of a statistical sample of a licensee's records, or some combination thereof. Once this has been done, OIG has also recommended that NRC redirect its funding for NMMSS to the NRC licensee database, dissolve the current Department of Energy (DOE)-NRC programmatic agreement for development and operation of NMMSS, and institute a new agreement relative to providing DOE with the information necessary to satisfy international SNM reporting obligations.

In lieu of abandoning NMMSS—to replace it with a new, independent NRC system of accounting for SNM—and the contractual relationship with the DOE to maintain it, NRC is systematically addressing contributing causes of the concerns regarding the adequacy and integrity of the current NMMSS database. NRC's activities in this regard include implementation of the NMMSS Rebaselining Project to facilitate the confirmation of licensee SNM holdings, direct NRC oversight of the NMMSS contractor's activities, and periodic coordination meetings with DOE to improve the effectiveness and efficiency of NMMSS operations and the NMMSS contractor's performance, among other efforts. In early FY 2005, NRC staff expects to assess the effectiveness of these activities in improving the availability and reliability of information in the NMMSS database and make recommendations for Commission consideration relative to possible rulemaking changes that would enhance NMMSS accuracy for SNM. NRC actions to address this OIG recommendation may not be completed until the end of FY 2006, depending on whether rulemaking is recommended and endorsed by the Commission.

Completion of the activities described above will complete agency action on the OIG's recommendations from this audit.



MANAGEMENT DECISIONS AND FINAL ACTIONS ON OIG AUDIT RECOMMENDATIONS

FOLLOW-UP REVIEW OF NRC'S INTERNET USAGE (OIG-03-A-21)

September 2, 2003

OIG recommended that NRC provide tools to assist NRC managers and supervisors to evaluate Internet usage within their organizations. NRC is continuing to develop capabilities and procedures for providing managers with a report regarding staff Internet use upon request, and work on the procedural and administrative issues, including coordination of implementation with the Agency Labor-Management Partnership Committee. The reporting capabilities, procedures, and guidance for managers are expected to be available by the end of October 2004, which will complete agency actions on the OIG's recommendations from this audit.

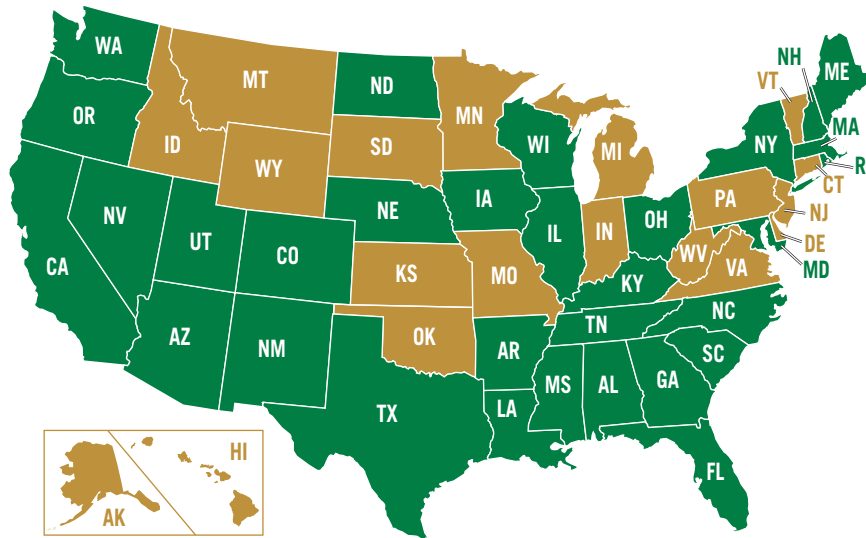
INDEPENDENT EVALUATION OF NRC'S IMPLEMENTATION OF THE FEDERAL INFORMATION SECURITY MANAGEMENT ACT FOR FY 2003 (OIG-03-A-22)

September 15, 2003

Due to the sensitive nature of the OIG's review and recommendations in this area, specific details are not furnished as part of this report. As of September 30, 2004, completion of agency actions on this OIG audit report requires certification and accreditation of some systems and completion of contingency plan testing and documentation of findings and recommendations identified during the testing. These activities are expected to be completed in the first quarter of FY 2005. These agency actions will be carried over to and tracked to completion via NRC's FY 2005 Plan of Action and Milestones required by the Federal Information Security Management Act.

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AGREEMENT STATES



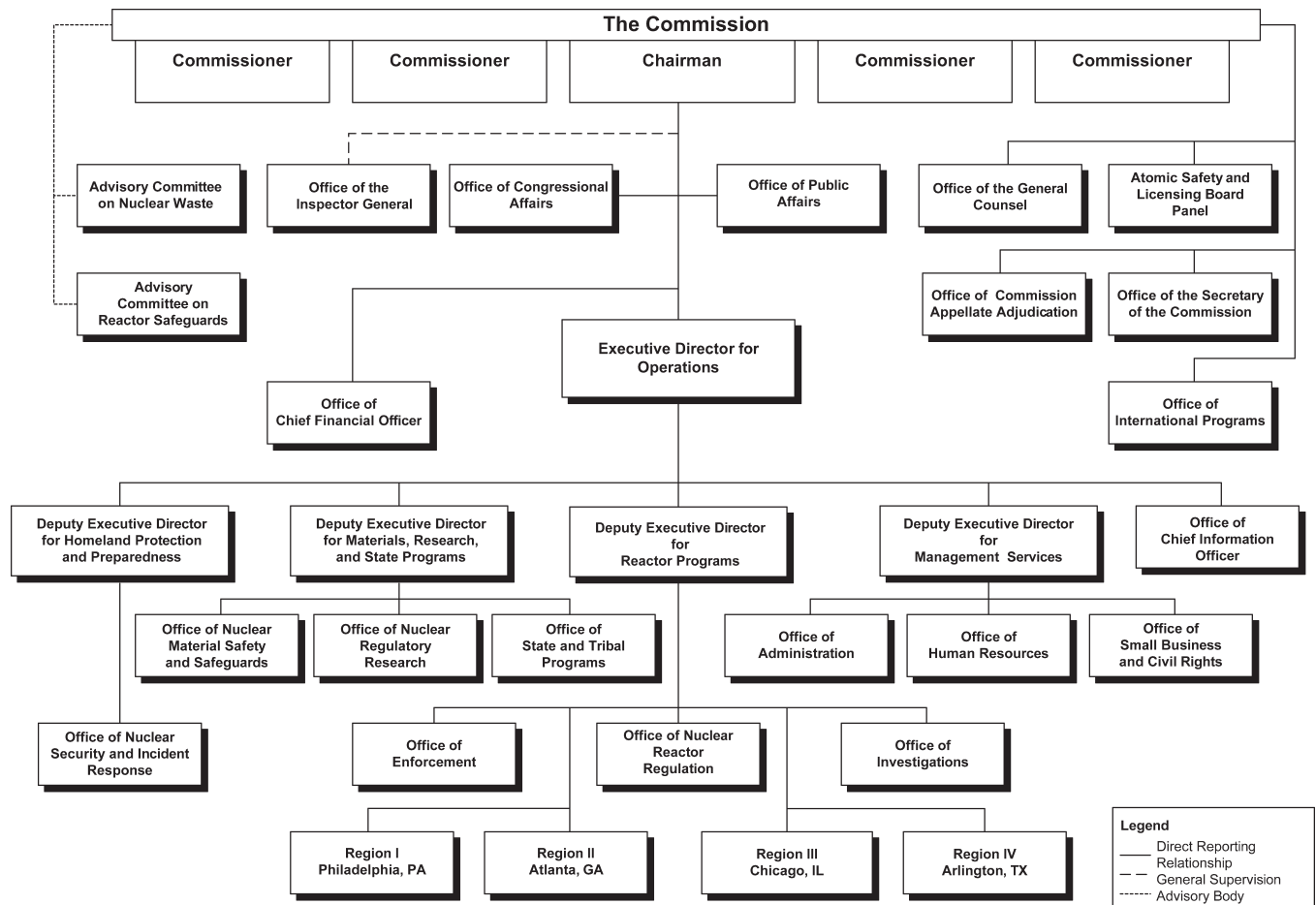
■ Agreement States (33)

Note: Minnesota and Pennsylvania have applications pending.

Alabama	Louisiana	North Dakota
Arkansas	Maine	Ohio
Arizona	Maryland	Oklahoma
California	Massachusetts	Oregon
Colorado	Mississippi	Rhode Island
Florida	Nebraska	South Carolina
Georgia	Nevada	Tennessee
Illinois	New Hampshire	Texas
Iowa	New Mexico	Utah
Kansas	New York	Washington
Kentucky	North Carolina	Wisconsin

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NRC ORGANIZATION CHART AS OF SEPTEMBER 30, 2004



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GLOSSARY OF ACRONYMS

ADAMS	Agencywide Documents Access and Management System
AICPA	American Institute of Certified Public Accountants
AID	Aid for International Development
AO	abnormal occurrence
ASP	accident sequence precursor
CFO	Chief Financial Officer
CFR	Code of Federal Regulations
CIO	Chief Information Officer
CIOC	CIO Council
CSRS	Civil Service Retirement System
CY	calendar year
DOE	Department of Energy
DOL	Department of Labor
E-Gov	electronic Government
EDO	Executive Director for Operations
EPA	Environment Protection Agency
FACTS I	Federal Agencies' Centralized Trial Balance System
FECA	Federal Employees Compensation Act
FERS	Federal Employees Retirement System
FFMIA	Federal Financial Management Improvement
FFS	Federal Financial System
FICA	Federal Insurance Compensation Act
FPPS	Federal Personnel and Payroll System
FY	fiscal year
GAO	Government Accountability Office
GFE	Generic Fundamentals Examination
GPEA	Government Paperwork Elimination Act
GSA	General Services Administration



GLOSSARY OF ACRONYMS

IAEA	International Atomic Energy Agency
IMPEP	Integrated Materials Performance Evaluation Program
Improvement Act	Federal Management Improvement Act of 1996
Integrity Act	Federal Manager's Financial Integrity Act of 1982
IOAA	Independent Offices Appropriation Act
IPAC	Intragovernment Payment and Collection
ISA	integrated safety analysis
IT	information technology
JFMIP	Joint Financial Management Information Program
MC&A	material control and accounting
MOX	mixed-oxide fuel
MWe	Megawatts electric
NBC	National Business Center
NFPA	National Fire Protection Association
NMED	Nuclear Materials Event Database
NMSS	Office of Nuclear Materials Safety and Safeguards
NMMSS	Nuclear Materials Management and Safeguards System
NRC	Nuclear Regulatory Commission
NRR	Office of Nuclear Reactor Regulation
NSIR	Office of Nuclear Security and Incident and Response
NWF	Nuclear Waste Fund
OBRA-90	Omnibus Budget Reconciliation Act of 1990
OCFO	Office of the Chief Financial Officer
OIG	Office of the Inspector General
OMB	Office of Management and Budget
PAR	Performance and Accountability Report
PBPM	planning, budgeting, and performance management
PRA	Probabilistic risk assessment
PRB	Petition Review Board

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RASP	Risk Assessment Standardization Project
RES	Office of Nuclear Regulatory Research
RLO	records liaison officer
RMG	records management guideline
ROP	reactor oversight process
SDLCM	system development life-cycle management
SDLCMM	system development life-cycle management methodology
SDP	Significance Determination Process
SFFAS	Statements of Federal Financial Accounting Standards
SFFAS Number 4	Managerial Cost Accounting Concepts and Standards for the Federal Government
SFFAS Number 10	Accounting for Internal Use Software
SNM	special nuclear material
TI	temporary instruction
TSP	Thrift Savings Plan

ENDNOTES

NUCLEAR REACTOR SAFETY

1. The industry safety indicators are derived through complex engineering and scientific analyses by NRC's Office of Nuclear Reactor Regulation, Office of Nuclear Regulatory Research, and contractors. As a result, analysis of some events for FY 2003 and FY 2004 are still ongoing. The performance indicator results are subject to minor variations when licensees submit revisions to the source data. These data may differ slightly from data reported in previous years as a result of refinements in data quality.
2. "Nuclear reactor accidents" are defined in the NRC Severe Accident Policy Statement (50 Federal Register 32138, dated August 8, 1985) as those events that result in substantial damage to the reactor fuel, whether or not serious offsite consequences occur. Data sources and verification: The NRC requires licensees to notify the NRC Operations Center of the declaration of any emergency specified in the licensee's NRC-approved Emergency Plan. Further, the NRC requires notifications for those non-emergency events specified in the regulations. Licensee compliance with notification regulations is periodically evaluated by the NRC. In addition, NRC resident inspectors are aware of the events that occur at nuclear plants.
3. Data sources and verification: The NRC requires licensees to report radiation exposures that exceed limits in the regulation, and NRC periodically evaluates licensee compliance with the reporting regulations. In addition, a resident inspector monitors each facility and would be aware of any deaths resulting from acute radiation exposures.
4. "Significant radiation exposures" are defined as those that result in unintended permanent functional damage to an organ or a physiological system as determined by a physician in accordance with Abnormal Occurrence Criterion I.A.3. Data sources and verification: The NRC requires licensees to report radiation exposures that exceed limits in the regulation, and the NRC periodically assesses licensee compliance with the reporting regulations. In addition, a resident inspector monitors each facility and would be aware of any significant radiation exposures in excess of reporting limits.
5. Data sources and verification: The NRC requires licensees to call to report any breaches of security or other event that may potentially lead to sabotage at a nuclear facility within 1 hour of such an occurrence. The licensee would also file a written report within 30 days of an event. In addition, NRC information assessment teams would follow up on any significant events, and the investigation would verify the accuracy of the information provided by the licensee.

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6. Releases that have the potential to cause “adverse impact” are currently undefined. As a surrogate, we use those that exceed the limits for reporting abnormal occurrences, as given by Abnormal Occurrence Criterion 1.B.1 [normally 5,000 times the limit specified in Table 2 (air and water) of Appendix B to 10 CFR Part 20]. Data sources and verification: The NRC requires licensees to report releases of radioactive materials that exceed limits in the regulation or license, and NRC periodically assesses licensee compliance with the reporting regulations. In addition, a resident inspector monitors each facility and would be aware of any instances in which radiation is released to the environment in excess of reporting limits.
7. The NRC provides oversight of plant safety performance on a plant-specific basis as well as on an industry-wide basis. The specific parameters and criteria for measuring statistically significant adverse trends in industry-wide safety performance include NRC-approved performance indicators, accident sequence precursor results, and other risk-related indicators or measures of industry safety performance. The NRC continues to refine and develop additional, more risk-informed indicators that will be qualified for use in phases. Data sources and verification: The NRC monitors industry safety performance through its reactor oversight process and requires licensees to file reports containing operational and event information. NRC Inspections confirm that these reports are complete and reliable.
8. Such events have a 1 in 1,000 (10^{-3}) or greater probability of leading to a nuclear reactor accident. Data sources and verification: The NRC’s Accident Sequence Precursor (ASP) Program systematically evaluates operating experience to identify, document, and rank events that have the potential to cause core damage. These events are identified through computerized screening of licensee event reports or other events designated by the NRC. Selected events then undergo an engineering evaluation to identify, analyze, and document precursor events. Preliminary analysis of potential precursor events are independently verified either by comparison of results from the Reactor Oversight Process or submitted for independent peer review by licensees and NRC to ensure that the plant design and its response to the precursor event are correctly characterized.
9. The regulatory limits used in this measure are those provided by 10 CFR 20.2203(a)(2), excluding instances of overexposures involving a shallow dose equivalent from a discrete radioactive particle in contact with the skin. Data sources and verification: The NRC requires licensees to report radiation exposures that exceed limits in the regulation, and the NRC periodically assesses licensee compliance with the reporting regulations. In addition, a resident inspector monitors each facility and would be aware of any significant radiation exposures in excess of reporting limits.



NUCLEAR REACTOR SAFETY

10. The regulatory limits used in this measure are those provided by 10 CFR 20.2203(a)(3).
Data sources and verification: The NRC requires licensees to report releases of radioactive materials that exceed limits in the regulation or license, and the NRC periodically assesses licensee compliance with the reporting regulations. In addition, a resident inspector monitors each facility and would be aware of any instances in which radiation is released to the environment in excess of reporting limits.
11. Substantial breakdowns of physical security are defined by Abnormal Occurrence Criterion I.C.4. Information pertaining to certain incidents may be either classified or under consideration for classification because of national security implications. Classified information will be withheld when formally reporting these incidents in accordance with Section 208 of the Energy Reorganization Act of 1974, as amended. Any classified details regarding these incidents would be available to the Congress, upon request, under appropriate security arrangements. Data sources and verification: The NRC tracks a variety of security performance data furnished by licensees to identify trends in physical security over time.
12. One event was identified in FY 2002 as having the potential of being a “significant” precursor. This precursor involved a reactor pressure vessel head degradation at Davis-Besse (see page 29 of last year’s report). Preliminary Accident Sequence Precursor analysis shows Davis-Besse as a significant precursor. It will be final after the licensee comments. Based on the screening and engineering evaluation of FY 2002 and FY 2003 events, no other potentially “significant” precursors were identified. Therefore, the second performance measure was not exceeded for FY 2002 and FY 2003. For FY 2004 events occurring before June 1, 2004, screening and engineering evaluation of these events identified no potentially “significant” precursors.
13. A 10 CFR 2.206 petition is a written request filed by any person to institute a proceeding to modify, suspend, or revoke a license, or for any other enforcement action. The petition specifies the requested action and sets forth the facts that constitute the basis for the request. The NRC evaluates the technical merits of the safety concern presented by the petition. Based on the facts determined by the NRC technical evaluation or investigation of the merits of the petition, the Director will issue a decision to grant or deny the petition, in whole or in part. The Director’s Decision explains the bases upon which the petition has been granted or denied and identifies the actions that the NRC has taken or will take in response to the petition.

The start time of the 120 days is the date that the Petition Review Board (PRB) determines that the proposed petition satisfies the criteria of NRC Management Directive 8.11, “Review

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Process for 10 CFR 2.206 Petitions,” and acknowledges by letter the petitioner’s request. For petitions received after October 1, 2000, the end time is the date of the proposed Director’s Decision. Supplements to the petition which require extension of the schedule will reset the beginning of the metric to the date of a new acknowledgment letter.

NUCLEAR MATERIALS SAFETY

14. Data source and verification: Events resulting in deaths could be reported to the NRC and/or Agreement States through a number of sources, but primarily through required licensee notifications. These events are summarized in event notifications and preliminary notifications, which are used to disseminate the information widely to the appropriate managers and staff. For Nuclear Materials Safety program activities, the Nuclear Materials Event Database (NMED) is an essential system for collecting information on such events. For fuel cycle activities, this extends to other hazardous materials used with, or produced from, licensed material consistent with 10 CFR Part 70. The decision on whether to ascribe the cause of a death to conditions related to acute radiation exposures or other hazardous materials will be made by NRC or Agreement State technical specialists or our consultants. The Fuel Cycle and Materials Inspection Programs are key elements in verifying the completeness and accuracy of licensee reports. The Integrated Materials Performance Evaluation Program (IMPEP) also provides a mechanism to verify that Agreement States and NRC regions are properly collecting and reporting such events and entering them into NMED as received from the licensees.

15. “Significant radiation exposures” are defined as those that result in unintended permanent functional damage to an organ or a physiological system as determined by a physician in accordance with Abnormal Occurrence Criterion I.A.3. Exposures to hazardous material (as defined by the Occupational Safety and Health Administration) apply only to fuel cycle and uranium recovery activities in the Nuclear Materials Safety program. Data source and verification: Events meeting this threshold could be reported to the NRC and/or Agreement States through a number of sources, but primarily through required licensee notifications. The NRC summarizes these events in event notifications and preliminary notifications, which are used to communicate this information internally to the appropriate managers and staff. For Nuclear Materials Safety program activities, the NMED is an essential system for collecting information on such events. For fuel cycle activities, this extends to other hazardous materials used with, or produced from, licensed material consistent with 10 CFR Part 70. The Fuel Cycle and Materials Inspection Programs are key elements in verifying the completeness and accuracy of licensee reports. The IMPEP also provides a



NUCLEAR MATERIALS SAFETY

mechanism to verify that Agreement States and NRC regions are properly collecting and reporting such events and entering them into NMED as received from the licensees.

16. Releases that have the potential to cause “adverse impact” are currently undefined. As a surrogate, we use those that exceed the limits for reporting abnormal occurrences as given by Abnormal Occurrence Criterion 1.B.1 [normally 5,000 times the limit specified in Table 2 (air and water) of Appendix B to 10 CFR Part 20]. This information is available in NUREG-0090, “Abnormal Occurrence (AO) Report to Congress,” on NRC Web site <http://www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr0090/v25/index.html>. Data source and verification: Events meeting this threshold could be reported to the NRC and/or Agreement States through a number of sources, but primarily through required licensee notifications. The NRC summarizes these events in event notifications and preliminary notifications, which are used to communicate this information internally to the appropriate managers and staff. For Nuclear Materials Safety Arena activities, the NMED is an essential system for collecting information on such events. The Fuel Cycle and Materials Inspection Programs are key elements in verifying the completeness and accuracy of licensee reports. The IMPEP also provides a mechanism to verify that Agreement States and NRC regions are properly collecting and reporting such events and entering them into NMED as received from the licensees.
17. Data source and verification: In accordance with Appendix G to 10 CFR Part 73 and 10 CFR 74.11(a), licensees are required to report events that involve losses, thefts, or diversions of formula quantities of strategic special nuclear material; radiological sabotages; or unauthorized enrichment of special nuclear material regulated by the NRC. Licensees must report such events to the NRC Headquarters Operations Center within 1 hour of their occurrence. Licensees are also required to file a followup written report with the NRC within 30 days of the event. The report must include sufficient information for NRC analysis and evaluation. The NRC then enters and tracks the events in NMED and initiates independent investigations to verify the reliability of the reported information. NRC investigation teams evaluate the validity of materials event data, in order to ensure that the licensees are collecting and reporting the proper event data. As a result, the NRC’s routine inspection program would discover any failures of appropriate licensee reporting. In addition, the NRC holds periodic meetings to validate previously screened events.
18. Data source and verification: In accordance with the requirements of 10 CFR 95.57, licensees are required to report any alleged or suspected violations of the Atomic Energy Act, Espionage Act, or other Federal statutes related to classified information. However, for

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performance reporting, the NRC only counts those disclosures or compromises that actually cause damage to national security. Such events are reported to the cognizant security agency (i.e., the security agency with jurisdiction) and the regional administrator of the appropriate NRC Regional Office, as listed in Appendix A to 10 CFR Part 73. The regional administrator then contacts the Division of Facilities and Security at NRC headquarters. The Division of Facilities and Security assesses the violation and notifies other offices at the NRC, as well as other Government agencies, as appropriate. A determination is then made as to whether the compromise caused damage to national security. Any unauthorized disclosures or compromises of classified information causing damage to national security would result in immediate investigation and followup by the NRC.

19. Performance targets have changed from FY 2000 to FY 2002 to reflect additional historical data. (Targets were as follows: FY 2000-356; FY 2001-350; FY 2002-300)
20. Events of material entering the public domain in an uncontrolled manner are reported under 10 CFR 20.2201(a)(1)(i) and (ii). The NMED lists these events as reported by NRC licensees and, through the Agreement States, the Agreement State licensees. Data sources and verification: Events meeting this threshold could be reported to the NRC and/or Agreement States through a number of sources but primarily through licensee notifications. The Materials Inspection Program is a key element in verifying the completeness and accuracy of licensee reports.
21. Data sources and verification: Licensees are required to immediately report any criticality event to the NRC Operations Center by telephone. Licensees must then submit followup written reports to the NRC within 30 days of the initial report. These reports must contain specific information describing the event, as required by NRC regulations. The NRC may dispatch an augmented or incident inspection team (depending on the severity of accident) to verify the completeness and accuracy of the licensee's report. An event of this nature is immediately investigated and followed up.
22. Performance targets have changed from FY 2000 to FY 2002 to reflect additional historical data. (Targets were as follows: FY 2000-19; FY 2001-40; FY 2002-30)
23. Overexposures are those that exceed the dose limits specified in 10 CFR 20.2203(a)(2) as tracked in NMED. For fuel cycle activities, this extends to other hazardous materials used with, or produced from, licensed material, consistent with 10 CFR Part 70. Reportable chemical exposures are those that exceed license commitments. Such events would also include chemical exposures involving uranium recovery activities under the Uranium Mill



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Tailings Radiation Control Act. Multiple people may be affected by a single causal event. Data sources and verification: Events meeting this threshold could be reported to the NRC and/or Agreement States through a number of sources, but primarily through licensee notifications. The Materials Inspection Program is a key element in verifying the completeness and accuracy of licensee reports. The IMPEP also verifies the accuracy of the event reports.

24. Medical events (misadministrations), as reported under 10 CFR Part 35, are tracked in NMED. Multiple patients may be affected by a single causal event. Data sources and verification: Events meeting this threshold could be reported to the NRC and/or Agreement States through a number of sources, but primarily through licensee notifications. The Materials Inspection Program is a key element in verifying the completeness and accuracy of licensee reports.
25. Performance targets have changed from FY 2000 to FY 2002 to reflect additional historical data (Targets were as follows: FY 2000-39; FY 2001-6; FY 2002-5)
26. Events that meet this measure are reportable under 10 CFR 20.2203(a)(3)(ii). Reports of such events must document actual releases of material; reportable events involving radiation fields are not counted under this measure. This measure also includes chemical releases from regulated activity under the Uranium Mill Tailings Radiation Control Act. Data sources and verification: Events meeting this threshold could be reported to the NRC and/or Agreement States through a number of sources, but primarily through licensee notifications. The Materials Inspection Program is a key element in verifying the completeness and accuracy of licensee reports.
27. “Malevolent use” is defined as the deliberate misuse of radioactive materials with the intent to cause physical or psychological harm to a person or persons, or to cause physical damage to a facility or the environment. The NRC evaluates intentional violations and deliberate acts against this definition. Data sources and verification: Events meeting this threshold could be reported to the NRC and/or Agreement States through a number of sources, but primarily through licensee notifications. The NRC responds to licensee reports or allegations by initiating an independent investigation to verify the completeness and accuracy of the data.
28. The NRC recognizes that no explicit reporting requirements exist for substantiated breakdowns of programs. The NRC relies on its safeguards inspection findings and licensee notifications. Data sources and verification: Such events must be recorded within 24 hours

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in a safeguards log maintained by the licensee. The NRC relies on its safeguards inspection program to help validate the reliability of the recorded data and determine whether a breakdown of a physical protection or material control and accounting system has, in actuality, resulted in a vulnerability. The NRC also evaluates the data in order to ensure that licensees are collecting and reporting the proper event data.

29. This involves chemical releases from NRC-regulated activities under the Uranium Mill Tailings Radiation Control Act. Data sources and verification: Events meeting this threshold could be reported to the NRC and/or Agreement States through a number of sources, but primarily through licensee notifications. The Materials Inspection Program is a key element in verifying the completeness and accuracy of licensee reports. Releases that cause impacts to the environment that cannot be mitigated within applicable regulatory limits using reasonably available methods are not readily defined. The expert judgement of NRC personnel and that of other agencies, such as the Environmental Protection Agency, are relied upon to make that determination. Events of this magnitude would result in prompt and thorough investigation.

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30. The decision on whether to ascribe the cause of a death to conditions related to acute radiation exposures will be made by NRC or Agreement State technical specialists or our consultants. Data sources and verification: Events meeting this threshold are reported to the NRC and/or Agreement States primarily through required licensee notifications, although other sources may also report such events. The NRC summarizes these events in event notifications and preliminary notifications, which are used to communicate this information internally to the appropriate managers and staff. The NRC then enters the reports into the Nuclear Materials Event Database (NMED), which is an essential system for collecting, tracking, and evaluating information on such events. The Integrated Materials Performance Evaluation Program (IMPEP) also provides a mechanism to verify that Agreement States and NRC regions are properly collecting and reporting such events and entering them into NMED as received from the licensees.

Determining whether any deaths result from acute radiation exposures is valid and fundamentally essential to protecting public health and safety. Events of this magnitude are not expected and would be rare. If such an event were to occur, it would result in prompt and thorough investigation of the event, its consequences, its root causes, and the necessary actions by the licensee and NRC to mitigate the situation and prevent recurrence. In addition to these immediate actions, the NRC holds periodic meetings where staff and management validate previously screened events.



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31. “Significant radiation exposures” are defined as those that result in unintended permanent functional damage to an organ or a physiological system as determined by a physician in accordance with Abnormal Occurrence Criterion I.A.3. Data sources and verification: Events meeting this threshold are reported to the NRC and/or Agreement States primarily through required licensee notifications, although other sources may also report such events. The NRC summarizes these events in event notifications and preliminary notifications, which are used to communicate this information internally to the appropriate managers and staff. The NRC then enters the reports into NMED, which is an essential system for collecting, tracking, and evaluating information on such events. The IMPEP also provides a mechanism to verify that Agreement States and NRC regions are properly collecting and reporting such events and entering them into NMED as received from the licensees.

Any event resulting in an unintended permanent function damage to an organ or physiological system compromises public health and safety. Events of this magnitude are not expected and would be rare. If such an event were to occur, it would result in prompt and thorough investigation of the event, its consequences, its root causes, and the necessary actions by the licensee and NRC to mitigate the situation and prevent recurrence. In addition to these immediate actions, the NRC holds periodic meetings where staff and management validate previously screened events.

32. Releases that have the potential to cause “adverse impact” are currently undefined. As a surrogate, we use those that exceed the limits for reporting abnormal occurrences as given by Abnormal Occurrence criterion 1.B.1 [normally 5,000 times the limit specified in Table 2 (air and water) of Appendix B to 10 CFR Part 20]. This information is available in NUREG-0090, the “Abnormal Occurrence Report to Congress,” which is available on the NRC’s Web site at www.nrc.gov/reading-rm/doc-collections/nuregs/staff/sr0090/index.html Data sources and verification: Events meeting this threshold are reported to the NRC and/or Agreement States primarily through required licensee notifications, although other sources may also report such events. The NRC summarizes these events in event notifications and preliminary notifications, which are used to communicate this information internally to the appropriate managers and staff. The NRC then enters the reports into NMED, which is an essential system for collecting, tracking, and evaluating information on such events. The IMPEP also provides a mechanism to verify that Agreement States and NRC regions are properly collecting and reporting such events and entering them into NMED as received from the licensees.

The events reported under this measure are those that threaten the environment. Events of this magnitude are not expected and would be rare. If such an event were to occur, it

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would result in prompt and thorough investigation of the event, its consequences, its root causes, and the necessary actions by the licensee and NRC to mitigate the situation and prevent recurrence. In addition to these immediate actions, the NRC holds periodic meetings where staff and management validate previously screened events.

33. Data sources and verification: In accordance with Appendix G to 10 CFR Part 73 and 10 CFR 74.11(a), licensees report events that entail losses, thefts, diversions, or radiological sabotage of special nuclear material or radioactive waste. Licensees must report such events to the NRC Headquarters Operations Center within 1 hour of their occurrence. Licensees are also required to file a followup written report with the NRC within 30 days of the event. The report must include sufficient information for NRC analysis and evaluation. The NRC then enters and tracks the events in NMED and initiates an independent investigation to verify the reliability of the reported information. Any Strategic Plan failure results in immediate investigation and followup, and is tracked in the Safeguards Summary Event List Database. Any lack of appropriate licensee reporting would be discovered through the routine inspection program. In addition to these immediate actions, the NRC holds periodic meetings where staff and management validate previously screened events.

This measure only applies to actual losses, thefts, diversions, or radiological sabotage. Attempts to steal, divert, or conduct sabotage using special nuclear material or radioactive waste are covered by a parallel measure at the performance goal level. Such events could compromise public health and safety, the environment, and the common defense and security.

34. Overexposures are those that exceed the dose limits specified in 10 CFR 20.2203(a)(2) as tracked in NMED. Data sources and verification: Events meeting this threshold are reported to the NRC and/or Agreement States primarily through required licensee notifications, although other sources may also report such events. The NRC summarizes these events in event notifications and preliminary notifications, which are used to communicate this information internally to the appropriate managers and staff. The NRC then enters the reports into NMED, which is an essential system for collecting, tracking, and evaluating information about such events. The IMPEP also provides a mechanism to verify that Agreement States and NRC regions are properly collecting and reporting such events, and entering them into NMED as received from the licensees.
35. The NRC recognizes that no explicit reporting requirements exist for substantiated breakdowns of physical protection. The NRC relies on its safeguards inspection findings and licensee notifications. Data sources and verification: Events such as those described above must be recorded within 24 hours in a safeguards log maintained by the licensee. No



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explicit reporting requirements exist for substantiated breakdowns of physical protection. The NRC relies on its safeguards inspection program to help validate the reliability of the recorded data and determine whether a breakdown of a physical protection system has, in actuality, resulted in a vulnerability. The NRC also evaluates the event data in order to ensure that licensees are collecting and reporting the proper event data.

36. A 30-day reporting requirement applies to such releases under 10 CFR 20.2203(a)(3).11. Data sources and verification: Under 10 CFR 20.2203(a)(3), the NRC requires licensees to report any radiological release to the environment within 30 days of occurrence, when such a release occurs as a result of operational activities and exceeds the regulatory limits. Events meeting this threshold are reported to the NRC and/or Agreement States primarily through required licensee notifications, although other sources may also report such events. The NRC summarizes these events in event notifications and preliminary notifications, which are used to communicate this information internally to the appropriate managers and staff. The NRC then enters the reports into NMED, which is an essential system for collecting, tracking, and evaluating information about such events. The IMPEP also provides a mechanism to verify that Agreement States and NRC regions are properly collecting and reporting such events and entering them into NMED as received from the licensees.
37. Measuring the protection of future generations over the planning period of the next 5 years is a unique challenge, which the Commission is continuing to evaluate. Data sources and verification: The NRC monitors events and issues related to the safe handling, use, transportation, storage, and disposal of radioactive waste and materials that are reported to the Commission in accordance with existing regulations. The NRC monitors events that might indicate a current or future inability of licensee or licensee's contractor's to perform a required function or activity in a safe manner. Any event, condition or substantiated allegation that is formally reported to the NRC is evaluated for safety impact and potential generic implications.
38. A 10 CFR 2.206 petition is a written request filed by any person to institute a proceeding to modify, suspend, or revoke a license, or for any other enforcement action. The petition specifies the requested action and sets forth the facts that constitute the basis for the request. The NRC evaluates the technical merits of the safety concern presented by the petition. Based on the facts determined by the NRC technical evaluation or investigation of the merits of the petition, the Director will issue a decision to grant or deny the petition, in whole or in part. The Director's Decision explains the bases upon which the agency has granted or denied the petition and identifies the actions that the NRC has taken (or will take) in response to the petition.

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39. The start time of the 120 days is the date that the Petition Review Board (PRB) determines that the proposed petition satisfies the criteria of NRC Management Directive 8.11, “Review Process for 10 CFR 2.206 Petitions,” and acknowledges the petitioner’s request with a formal letter. The end time is the date of the proposed Director’s Decision. Supplements to the petition that require extension of the schedule will reset the beginning of the metric to the date of a new acknowledgment letter.

INTERNATIONAL NUCLEAR SAFETY SUPPORT

40. “Domestic safeguards” are those nuclear material control and accounting measures and physical protection measures implemented by and within any country, including the United States, to prevent sabotage of nuclear materials or facilities or theft or diversion of nuclear materials by an individual or group within that country. Secure use of nuclear materials is achieved through the successful implementation of domestic safeguards. “International safeguards” are the independent verifications performed by the IAEA of a country’s “peaceful use” declarations on nuclear materials and nuclear facilities.
41. Section 123 of the Atomic Energy Act, as amended, requires agreements for Cooperation in the Civil/Peaceful Use of Nuclear Energy to establish the legal framework for technical cooperation in the production and use of special nuclear material, as well as for the supply of such material or fuel cycle equipment, or related sensitive information, to another country or international organization. These Agreements for Cooperation (or Section 123 Agreements, as they are also known) include such nonproliferation conditions and controls as safeguards commitments; a guarantee of no explosive or military use; a guarantee of adequate physical protection; and U.S. rights to approve retransfers, enrichment, reprocessing, other alterations in form or content, and storage of U.S.-supplied or derived material. They must be in effect before the NRC can issue an export license.
42. “Significant incidents” are incidents that include a loss (by theft or diversion) of 1 or more kilograms of weapons-grade uranium or plutonium, the detonation by a non-nuclear weapon state of a nuclear explosive device, or the abrogation of Nuclear Nonproliferation Treaty safeguard commitments by a non-nuclear weapon state.

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U.S. NUCLEAR REGULATORY COMMISSION
Washington, D.C. 20555-0001

www.nrc.gov

NUREG-1542, Vol. 10