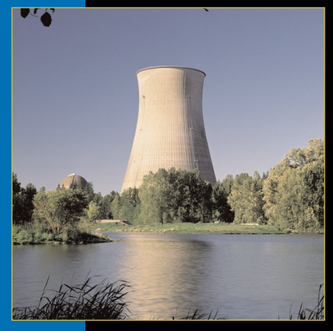
NUREG–1542, Vol. 8

NUREG–1542, Vol. 8

Performance and Accountability Report Fiscal Year 2002

January 2003

SUCCESS THROUGH SAFETY



U.S. NUCLEAR REGULATORY COMMISSION

PERFORMANCE AND ACCOUNTABILITY REPORT
FISCAL YEAR 2002

TABLE OF CONTENTS

This report is available on the NRC Web site at www.nrc.gov.

➤ The NRC is headed by a Commission composed of five members, with one member designated by the President to serve as Chairman. Pictured below are (from left to right) Commissioners McGaffigan and Dicus, Chairman Meserve, and Commissioners Diaz and Merrifield.

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 Fiscal Year 2002. I am proud to report that, as a result of the hard work and dedication of Nuclear Regulatory Commission employees, we have again achieved all of our safety performance goals while at the same time addressing significantly heightened security concerns.

In the aftermath of the tragic events of September 11th, the Nuclear Regulatory Commission has conducted a comprehensive review of its programs and the security of the nuclear facilities and activities it regulates. We have made a number of significant changes to our regulatory programs and have enhanced the already robust security of our sensitive facilities and activities. The Nuclear Regulatory Commission will continue to work closely with other agencies and our licensees to protect the Nation's crucial infrastructure from future attacks. The ongoing terrorism threat requires that we continue to invest significant resources on homeland security activities.

At the same time, we have continued to build on the progress we have made over the past decade to improve nuclear safety. Our oversight of the industry is achieving the objective of protecting public health and safety while maintaining the energy output needed by our Nation. Moreover, we have and will continue to invest resources to prepare for the future. Demand for electric power and the improving economic fundamentals of nuclear power generation have resulted in renewed interest in nuclear power. As a result, licensees are seeking to renew their operating licenses for existing plants and are considering new reactor designs and new plant construction. We are also preparing to review the Department of Energy's application to construct and operate a first-of-a-kind repository to dispose of high-level nuclear waste at Yucca Mountain, Nevada.

In undertaking this work, it is essential that our resources are well managed and wisely used. This report provides financial information that shows the prudent management of the funds entrusted to us by the American people and describes our successes in implementing the President's Management Agenda to promote more efficient and effective government.

The Reports Consolidation Act of 2000 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 believe that the data are complete and reliable. In addition, the Nuclear Regulatory Commission has evaluated its management controls and financial management systems, as required by the Federal Managers' Financial Integrity Act of 1982. On the basis of our comprehensive management control program, I am pleased to certify, with reasonable assurance, that the agency is in compliance with the provisions of this act.

The Nuclear Regulatory Commission is committed to conducting an effective regulatory program that allows the Nation to use nuclear materials in a manner that protects the public and the environment. We look forward to continuing to provide high-quality service to the American people.

Richard A. Meserve
January 21, 2003

➤ NRC Headquarters building, Rockville, Maryland

The NRC Mission

The U.S. Nuclear Regulatory Commission regulates the Nation's civilian use of byproduct, source, and special nuclear materials to ensure adequate protection of public health and safety, to promote the common defense and security, and to protect the environment.

INTRODUCTION

This Performance and Accountability Report represents the culmination of the NRC's program and financial management processes, which began with mission and program planning, continued through the formulation and justification of the NRC's budget to the President and the Congress, and ended with this report on the 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 of 2000, and covers activities from October 1, 2001, to September 30, 2002.

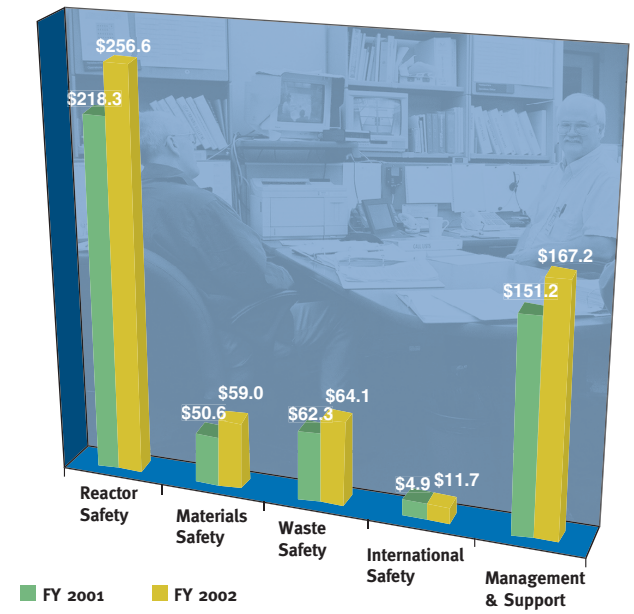
Chapter 1, Management's Discussion and Analysis, provides a high-level overview of the NRC. It consists of six sections: About the NRC, which describes the agency's mission, organizational structure, and regulatory responsibility; Future Challenges, which includes forward-looking information; Program Performance Overview, which discusses the agency's success in achieving its strategic goals; President's Management Agenda, which describes the agency progress in "Getting to Green" for the five management initiatives; Financial Performance Overview, which provides highlights of the NRC's financial position and audit results; and Systems, Controls, and Legal Compliance, which 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 Government agency to regulate various commercial and institutional uses of nuclear materials. The NRC's purpose is defined by the Atomic Energy Act of 1954, as amended, and

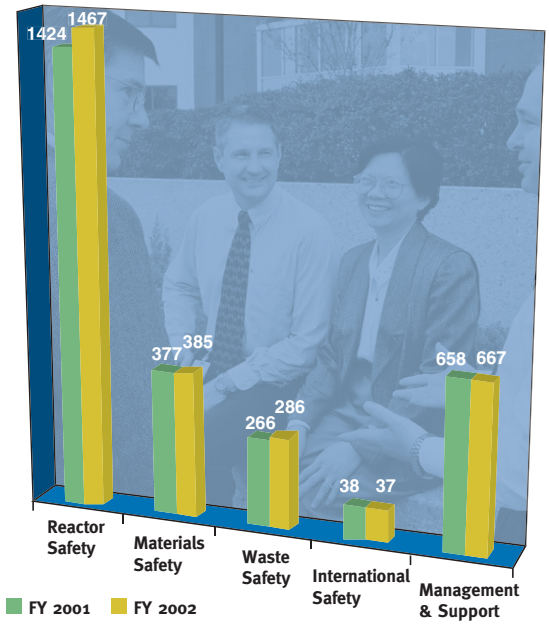
BUDGET AUTHORITY BY PROGRAM

In millions

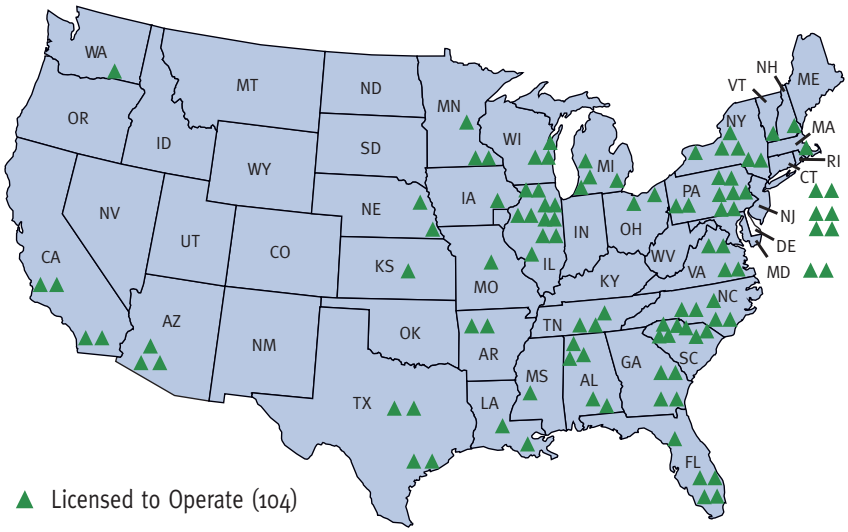


DISTRIBUTION OF EMPLOYEES BY PROGRAM

Full-time equivalents



U.S. Commercial Nuclear Power Reactors

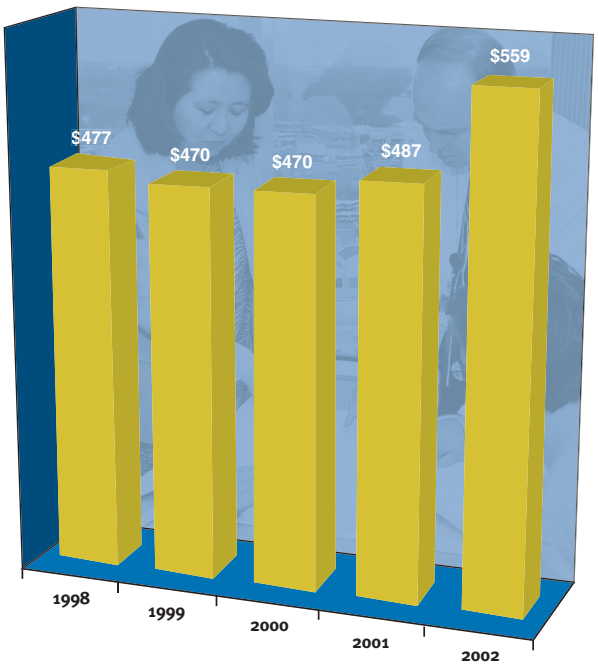


➤ **Note:** Includes Browns Ferry Unit 1, which has no fuel loaded and requires Commission approval to restart. There are no commercial reactors in Alaska or Hawaii.

Source: Nuclear Regulatory Commission

NRC NEW BUDGET AUTHORITY

In millions



the Energy Reorganization Act of 1974, 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, and serves a term of 5 years. The Chairman serves as the principal executive officer and official spokesman for the Commission. The chief operating officer is the Executive Director for Operations, who carries out the program policies and decisions made by the Commission.

➤ NRC Commissioners meeting

The NRC's headquarters offices are located in Rockville, Maryland. Four regional offices are located in King of Prussia, Pennsylvania; Atlanta, Georgia; Lisle, Illinois; and Arlington, Texas; and a technical training center is located in Chattanooga, Tennessee. The NRC also has resident inspector offices at each commercial nuclear power plant.

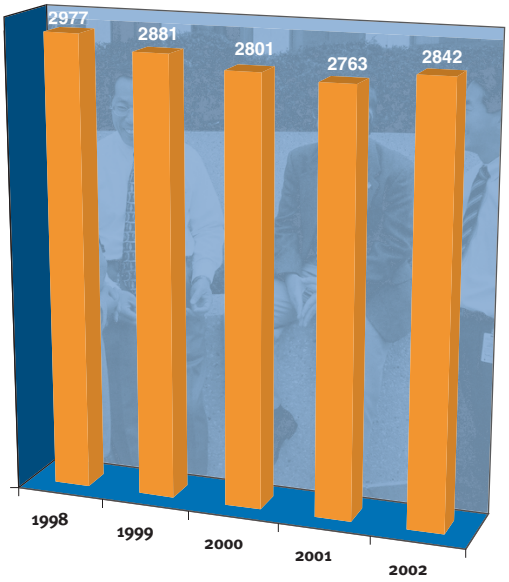
The NRC's FY 2002 budget was $558.6 million and 2,842 full-time equivalent staff. The FY 2001 budget was $487.3 million and 2,763 full-time equivalent staff. The NRC is a fee-based agency that recovers most of its funding from fees paid by those holding NRC licenses. Approximately 46 percent of the budget and 52 percent of the staff are allocated for reactor safety.

Regulatory Responsibility

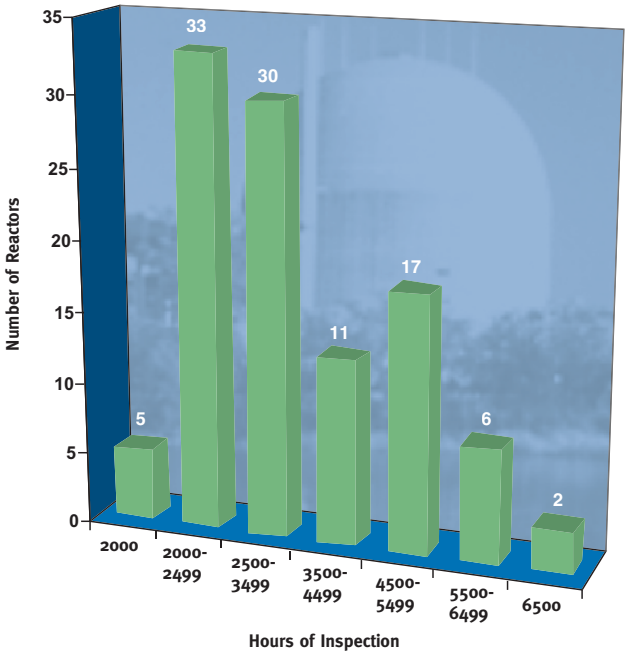
To fulfill its responsibility to protect the public health and safety, the NRC performs three principal regulatory functions: (1) establish standards and regulations, (2) issue licenses for nuclear facilities and users of nuclear materials, and (3) inspect facilities and users of nuclear materials to ensure compliance with regulatory requirements. These regulatory functions relate to both nuclear power plants 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.

NRC PERSONNEL CEILING

Full-time equivalents



NRC INSPECTION EFFORT AT OPERATING REACTORS, FY 2001



- **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.
- **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 or 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 heath 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.

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 1991, nuclear electric generation has increased by 25 percent. The NRC expends an average of 3,400 hours of inspection effort at each operating reactor and licenses approximately 4,500 reactor operators.

The NRC oversees approximately 4,900 licenses for medical, academic, industrial, and general uses of nuclear materials. The NRC conducts approximately 1,500 health and safety inspections of its nuclear materials licensees annually. Additionally, approximately 16,300 licenses are administered by the 32 States that participate in the 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 fully 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.

FUTURE CHALLENGES

The Commission is focused on addressing a number of significant challenges, which will have long-term impact on accomplishment of its mission. The ongoing terrorism threat requires that the NRC invest significant resources on homeland security related activities. In addition, the NRC needs to review applications from industry in preparation for the possibility of new applications to construct nuclear power plants. A third major challenge is preparing for a potential license application for a high-level waste repository.

Homeland Security

Long before September 11, 2001, the NRC required that major NRC licensees maintain rigorous security programs. Although the details are classified, this typically involves a fenced perimeter, intrusion detection devices, access barriers, heavily armed and trained guard forces, and a comprehensive defensive strategy. Nuclear plant operators are subject to comprehensive regulatory requirements and detailed inspection, including periodic force-on-force exercises. However, the events of September 11 have changed the threat profile the industry faces.

Since September 2001, the NRC has been conducting a comprehensive review of its programs and security of the nuclear facilities and activities it regulates. The Commission has made a number of significant changes to its regulatory programs and has enhanced the already robust security of sensitive facilities and activities. A new Office of Nuclear Security and Incident Response was established to focus and coordinate the agency' s efforts and expertise in the security and emergency preparedness areas. The NRC implemented a new homeland security threat advisory system based on guidance from the Department of Homeland Security and has included additional classes of licensees in the threat advisory system. The NRC is studying the potential vulnerability of nuclear power plants, fuel cycle facilities, and nuclear fuel and materials storage and transportation containers, including deliberate aircraft crashes on power reactors and storage and transportation casks. The agency completed a new round of tabletop exercises using expanded threat scenarios for power reactor facilities and selected fuel cycle facilities in November 2002. The lessons learned from these exercises will be incorporated into an expanded force-on-force program. In the course of these efforts, the NRC has had the benefit of continuing interaction, consultation, and coordination with several Federal agencies and the State governments.

Next year, the Commission expects to complete its review and revision of the design basis threat that provides the foundation for the security programs of nuclear power plant and category I fuel facility licensees, and will then proceed to revise its safeguards and security requirements. The NRC plans to conduct full security performance reviews, including force-on-force exercises, at each nuclear power plant on a 3-year cycle instead of the 8-year cycle that had been used prior to September 11, 2001. The NRC will complete the vulnerability assessment studies, continue to evaluate vulnerabilities of the facilities, and implement appropriate measures to reduce identified vulnerability to these facilities. The agency is working with the Department of Energy (DOE) and the International Atomic Energy Agency (IAEA) to enhance the control of radioactive

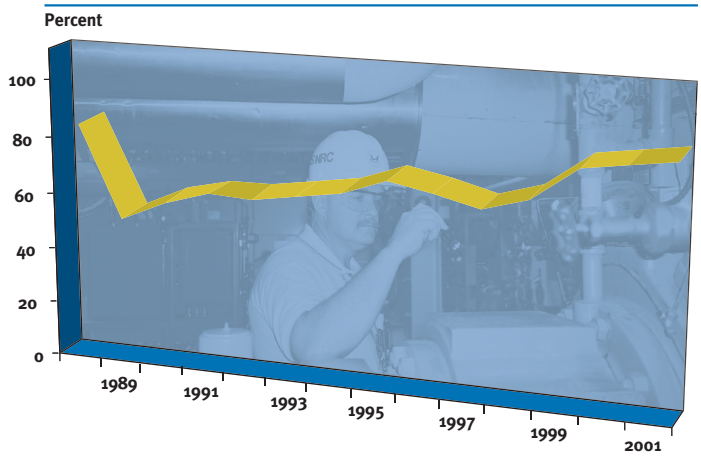
material to prevent its use in radiological dispersal devices (dirty bombs), and are involved significantly in a review of controls of radioactive sources with the same objectives.

The NRC's activities are part of an integrated, national effort for the protection of the Nation's critical infrastructure. We continue to work closely with the Department of Homeland Security, other agencies, and our licensees to protect our country.

Nuclear Power and National Energy Needs

The question of where and how the United States will obtain the energy it needs, now and in the decades to come, is a matter of national importance. The availability and price of energy continues to play a crucial role in determining the quality of life for Americans now. Nuclear power currently supplies 20 percent of U.S. electricity needs. The President's National Energy Policy has cited nuclear power as a vital component of America's energy portfolio.

AVERAGE NUCLEAR REACTOR CAPACITY FACTOR



The NRC's mission is to ensure the protection of the public health and safety in the use of nuclear materials. The NRC also has an obligation to fulfill its regulatory duties without imposing unnecessary burdens on the industry. The challenge is to allow for innovation and improvements by operators in utilizing their power generation facilities while ensuring that the focus on safety remains the first priority in the use of nuclear power.

Compared to the operating record at the beginning of the 1990s, nuclear power plants today are more efficiently run, with fewer outages and greater reliability. In less than a decade, average capacity utilization in the industry has increased from 70 percent to nearly 90 percent in 2001. At the same time, objective measures of safety performance have also shown considerable improvement. The growth in demand for electric power, improved economic fundamentals for nuclear power generation, and concerns about the supply of energy from other sources and their environmental impact have increased electric utilities' interest in building and operating new nuclear power plants. The NRC is currently reviewing one design certification application and expects to receive up to four additional applications in the next 2 years. Three early site permit applications are also expected within the next year. The NRC is also putting in place the necessary regulatory processes to review an application for a new plant and to monitor its construction. The NRC must meet the challenge of keeping pace with industry plans and schedules for new reactor licensing activities, including early site permit reviews, design reviews, and enhancement to the regulatory infrastructure.

➤ Dry cask storage for nuclear waste

Despite the overall improvement in safety indicators, the Commission must always be prepared to respond to unexpected events that occur at nuclear power reactors. For example, in March 2002, during NRC-mandated assessment activities, a cavity in the reactor pressure vessel head was discovered at the Davis-Besse Nuclear Power Station by the licensee. The NRC dispatched an inspection team to gather facts surrounding the circumstances associated with the event. As a result, the NRC has required all pressurized-water reactor licensees to ensure that similar degradation has not occurred at other plants and to ensure the continued safety of the reactors. The NRC also formed a task force to assess its regulatory processes as a result of this significant incident. The task force issued its report on September 30, 2002, and the agency is using the report to develop future agency actions. (A copy of the task force's report, as well as a host of other information relating to reactor vessel head degradation and the Davis-Besse event, can be found on the NRC's Web site.) The plant remains shut down for replacement of the reactor vessel head and for broad safety reviews and performance improvement activities. NRC approval is required before the plant can restart.

Nuclear Waste

Radioactive waste is a byproduct of generating nuclear power. In April 2002, the President accepted the Secretary of Energy's recommendation that the Yucca Mountain site be developed as a potential repository for the disposal of high-level nuclear wastes and spent nuclear fuel. In July 2002, Congress approved a resolution of siting approval, which authorizes DOE to apply to the NRC for a license to operate Yucca Mountain as a nuclear waste repository. The NRC will be prepared to review a potential license application from DOE, which is expected to be filed in late 2004. This includes resolving key technical issues through prelicensing consultations with DOE, observing DOE's quality assurance audits, and communicating extensively with stakeholders. The NRC will also prepare for hearings on the potential license application.

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 (GPRA). The NRC evaluates its program performance within a structured planning, budgeting, and performance management (PBPM) process. As such, the NRC has organized its strategic goals, performance goals, and strategies for achieving its mission into four strategic arenas. Our highest priority is safety, and our strategic goals focus on the achievement of this priority.

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 civilian nuclear power reactors licensed to operate and 36 non-power reactors. During FYs 2001 and 2002, the NRC met all five of the strategic goal measures for this arena.

For the past year, the NRC met or exceeded all established schedules for license renewal activities. This is significant given the interest by our licensees whose licenses need to be renewed to continue operations. In addition, during FY 2002 the NRC approved 17

requests from licensees for power uprates, which increase the electrical generating capacity of the licensees' nuclear reactor power plants. To date, the NRC has approved 81 requests from licensees for power uprates. Approval of power uprates has resulted in an electrical generating capacity gain equivalent to approximately three large nuclear power plants. To promote common defense and security, the NRC took significant actions requiring licensees to enhance the already robust security at nuclear power plants and other sensitive facilities.

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 NRC has regulatory oversight for 44 fuel cycle facilities, including eight major fuel cycle facilities and two gaseous diffusion plants. This strategic arena also includes oversight of approximately 21,000 specific and 150,000 general licenses regulated by the NRC and the 32 Agreement States. During FYs 2001 and 2002, the NRC met all five of its strategic goal measures for this arena.

In addition to achieving our strategic goal measures, it is noteworthy to describe the NRC's progress in reviewing an application from Duke, Cogema, Stone & Webster to construct a mixed-oxide (MOX) fuel fabrication facility at the DOE's Savannah River site near Aiken, South Carolina. The proposed use of MOX fuel is part of a national non-proliferation effort to dispose of surplus weapons-usable plutonium by irradiating it in existing commercial light-water reactors. The NRC issued a draft Safety Evaluation Report for construction in April 2002, documenting its preliminary safety conclusions. The NRC discussed its review process and preliminary conclusions at a public meeting held in South Carolina in August 2002. In response to changes in the national non-proliferation effort, the applicant submitted a revised construction authorization request in October 2002. NRC staff have begun review of the revised construction authorization request and plan to complete a revised draft Safety Evaluation Report in spring 2003.

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.

The Nuclear Waste Safety arena 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 FYs 2001 and 2002, the NRC met all four of its strategic goal measures for this arena.

In 1987, the Nuclear Waste Policy Act (NWPA) was amended directing the DOE to characterize only one site at Yucca Mountain in the State of Nevada. In April 2002, the President accepted the Secretary of Energy's recommendation that the Yucca Mountain site be developed as a potential repository for the disposal of high-level nuclear wastes and spent nuclear fuel. In July 2002, Congress approved a resolution of siting approval, which authorizes DOE to apply to the NRC for a license to operate Yucca Mountain as a nuclear waste repository.

In FY 2002, NRC continued to build and refine the regulatory framework that will be used to evaluate a license application for the proposed Yucca Mountain repository. The NRC's final regulation for Yucca Mountain in 10 CFR Part 63 was issued in November 2001. NRC staff also published, for public comment, a proposed rule that addresses "unlikely events"—events that can be excluded from certain required assessments due to their low probability of occurrence—for the proposed Yucca Mountain repository. The NRC also issued, for public comment, the draft Yucca Mountain Review Plan, Revision 2, an important companion to the rules in 10 CFR Part 63. The Review Plan describes the information the staff is to review in the license application and the criteria for determining whether issues have been satisfactorily addressed.

International Nuclear Safety Support

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

This arena 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. All three measures established for this arena were met in FYs 2001 and 2002.

During FY 2002, the NRC participated in IAEA Operational Safety Review Team activities in the Czech Republic and Hungary; International Regulatory Review Team activities in Armenia, Mexico, Lithuania, the Czech Republic; and Radiation Protection activities in Tajikistan. In addition, bilateral assistance activities were conducted for nuclear safety and safeguards with Russia, the Ukraine, Armenia, Kazakhstan, and countries of central and Eastern Europe in close coordination with the departments of State and Energy. These activities provide an objective international peer review of nuclear power plant operational safety against international standards and practices. The international composition of the review team enables it to provide observations that may not have been previously considered by U.S. industry or regulators.

The NRC also successfully concluded eight bilateral exchange agreements in FY 2002 between the NRC and appropriate foreign counterparts, to ensure that an effective framework for the NRC's international exchanges is in place.

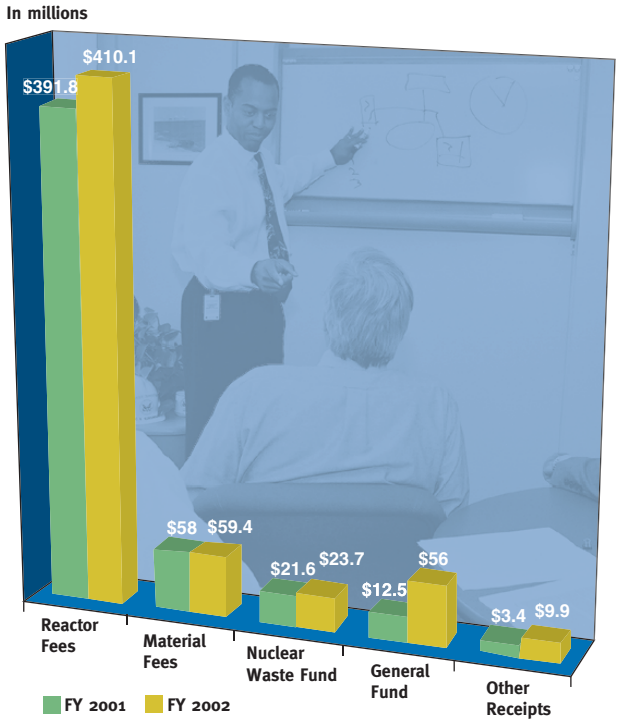
PRESIDENT'S MANAGEMENT AGENDA

In August 2001, the President launched a management reform agenda targeted to "address the most apparent deficiencies where the opportunity to improve performance is the greatest." The Governmentwide initiatives of the President's Management Agenda are to reform Government to be more citizen-centered, results-oriented, and market-based and to actively promote competition. As a result, the President identified five Governmentwide goals: (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 responding to the call from the President 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, 2002, and 2001, 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



Sources of Funds

The NRC has two appropriations, Salaries and Expenses and Office of the Inspector General, and funds for both appropriations are available until expended. The NRC's total new FY 2002 budget authority was $558.6 million, of this amount $552.4 million is for the Salaries and Expenses appropriation, which included $36 million in Emergency Supplemental funding to respond to the terrorist attacks on the United States, and $6.2 million is for the Office of the Inspector General appropriation. This represents an overall increase in new budget authority of $71.3 million over FY 2001 ($70.6 million for the Salaries and Expenses appropriation and $0.7 million for the Office of the Inspector General appropriation). In addition, $28.6 million from prior-year appropriations, $2.7 million from prior-year reimbursable work, and $6.1 million for new reimbursable work to be performed for others were available to obligate in FY 2002. The sum of all funds available to obligate for FY 2002 was $596.0 million, which is a $68.7 million increase over the FY 2001 amount of $527.4 million.

Consistent with the requirements of the Omnibus Budget Reconciliation Act of 1990, as amended, the NRC collected fees to offset approximately 96 percent of its new budget authority in FY 2002 and approximately 98 percent of its new budget authority in FY 2001, excluding funds derived from the Nuclear Waste Fund, General Fund, and other offsetting receipts.

➤ NRC assesses the impact of nuclear power production on the environment

Uses of Funds by Function

The NRC incurred obligations of $558.7 million, which was an increase of $58.0 million over FY 2001. Approximately 56 percent of obligations were used for salaries and benefits. The remaining 44 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 2002 was $37.3 million, which is an increase over the FY 2001 amount of $26.7 million. Of this $37.3 million total, $3.2 million was for reimbursable work and $34.1 million is available to fund critical needs in FY 2003.

Audit Results

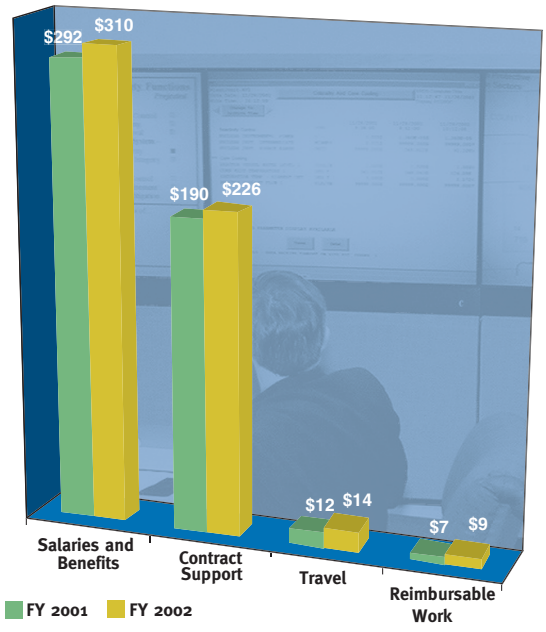
The NRC received an unqualified audit opinion on its FY 2002 financial statements. This was the ninth consecutive year the agency has received an unqualified opinion. For FY 2002, the auditors identified one material weakness regarding the implementation of SFFAS Number 4, Managerial Cost Accounting Concepts and Standards for the Federal Government. The auditors also identified this as a substantial noncompliance with the Federal Financial Management Improvement Act (FFMIA) of 1996. NRC's management disagrees, in part, with the auditor's assessment. A discussion of this issue can be found in Chapter 3 in the auditor's report and management's response to the audit report.

In FY 2001, the auditors also identified incomplete implementation of SFFAS Number 10, Accounting for Internal Use Software, as a material weakness and substantial non-compliance with FFMIA. During FY 2002, the auditors evaluated the NRC's corrective actions and closed this material weakness and substantial noncompliance.

For FY 2002, the auditors also identified two new reportable conditions concerning accounting for internal use software and external financial reporting. In addition, seven reportable conditions were carried over from FY 2001. Two of these reportable conditions remained open at the end of FY 2002 concerning the development of the hourly rate for license

USES OF FUNDS BY FUNCTION

In millions



ASSET SUMMARY (in millions)

	FY 2002	FY 2001
Fund Balance with Treasury	$181.4	$140.5
Accounts Receivable, Net	44.8	51.4
Property, Plant, & Equipment, Net	36.9	43.8
Other	1.2	1.2
Total Assets	$264.3	$236.9

LIABILITIES SUMMARY (in millions)

	FY 2002	FY 2001
Accounts Payable	$28.4	$28.5
Federal Employee Benefits	9.1	10.8
Other Liabilities	99.0	103.9
Total Liabilities	$136.5	$143.2

NET POSITION SUMMARY (in millions)

	FY 2002	FY 2001
Unexpended Appropriations	$128.3	$87.0
Cumulative Results of Operations	(0.4)	6.7
Total Net Position	$127.9	$93.7

fees and processing of contract closeouts. A reportable condition on compliance with computer software accountability, which is also still open, will no longer be reported as part of the principal statements. The agency has taken action on these audit findings and expects to fully implement corrective action during FY 2003.

Financial Statement Highlights

The NRC's financial statements summarize the financial activity and financial position of the agency. The financial statements, footnotes, and the balance of the required supplementary information, appear in Chapter 3 of this report. Analysis of the principal statements follows.

Analysis of the Balance Sheet

The NRC's assets were approximately $264.3 million as of September 30, 2002. This is an increase of $27.4 million from the end of FY 2001 and is mainly due to an increase in Fund Balance with Treasury. The assets reported in the NRC's Balance Sheet are summarized in the table (above left).

The Fund Balance with Treasury represents the NRC's largest asset of $181.4 million as of September 30, 2002, an increase of $40.9 million from the FY 2001 year-end balance. This balance accounts for approximately 70 percent of total assets 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, 2002, were $44.8 million and includes an offsetting allowance for doubtful accounts of $2.7 million.

This is a 13 percent decrease over the FY 2001 year-end Accounts Receivable, Net, balance of $51.4 million. Accounts Receivable Due from the Public is $42.8 million, representing 16 percent of total assets.

The value of Property, Plant, and Equipment, Net, was $36.9 million, representing 14 percent of total assets. The majority of the balance is comprised of nuclear reactor simulators, leasehold improvements, and computer hardware and software. The Property, Plant, and Equipment line item reflects the adoption of capitalizing the full costs of developing internal use software, as required by SSFAS Number 10, Accounting for Internal Use Software, implemented on October 1, 2000.

The NRC's liabilities were $136.5 million as of September 30, 2002. The table on page 14 shows a decrease in total liabilities of $6.7 million from the FY 2001 year-end balance of $143.2 million. This is mainly due to a decrease of $6.6 million in the liability to the U.S. Treasury for assessed license fees, which, when collected, are used to offset the NRC's appropriations. Other liabilities include $44.2 million for recoveries from unbilled accounts receivable, $18.1 million for accrued salaries to employees, and $28.3 million for accrued annual leave. Of the agency's liabilities, $39.3 million were not covered by budgetary resources, which equaled the balance as of September 30, 2001. 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.

The difference between total assets and total liabilities, net position, was $127.9 million as of September 30, 2002. The table at the bottom of page 14 shows an increase of $34.2 million from the FY 2001 year-end balance. The increase is mainly the result of an increase in Unexpended Appropriations, which is the amount of authority granted by Congress that has not been expended. The increase is due to receipt in January 2002 of Emergency Supplemental Appropriation funding of $36.0 million to respond to the terrorist attacks on the United States. Cumulative results of operations represent net results of operations since the NRC's inception. Prior-period adjustments are included in net results of operations.

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 under GPRA reporting to the cost of programs. The NRC's net cost of operations for the year ended September 30, 2002, was $79.2 million, which is an increase of $28.6 million over the FY 2001 net cost of $50.6 million. This increase is due to funding homeland security from the General Fund and a reduction of the NRC budget recovered by license fees. Net costs by strategic arena are shown in the table on page 16.

Total exchange revenue was $473.1 million for the year ended September 30, 2002, which is an increase of $9.1 million over the exchange revenue of $464.0 million for the year ended September 30, 2001. 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 net cost of operations is expected to decrease in FY 2003 due to the potential appropriation of fee recoverable funds for homeland security activities. The requirement to recover approximately 100 percent of the agency's new budget authority by assessing fees, less amounts appropriated from the Nuclear Waste Fund and the General Fund, was reduced to 96 percent in FY 2002 and will continue to decrease two percent each year until FY 2005, when the fee recovery amount will be 90 percent.

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 increase in Net Position of $34.2 million from FY 2001 to FY 2002 represents the net change in Cumulative Results of Operations of –$7.1 million and an increase in Unexpended Appropriations of $41.5 million.

NET COST OF OPERATIONS (in millions)

	FY 2002	FY 2001
Nuclear Reactor Safety	$(43.5)	$(57.8)
Nuclear Materials Safety	38.7	29.4
Nuclear Waste Safety	72.1	67.4
International Nuclear Safety Support	11.9	11.6
Net Cost of Operations	$79.2	$50.6

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 2002, NRC had budgetary resources available of $596.0 million, the majority of which was derived from new budget authority. This represents a 13 percent increase over FY 2001 budgetary resources available of $527.4 million.

For FY 2002, the status of budgetary resources showed obligations of $558.7 million, or 94 percent of funds available. This is comparable to FY 2001 obligations of $500.7 million, or 95 percent of funds available. Total outlays for FY 2002 were $516.1 million, which represents a $32 million increase from FY 2001 total outlays of $484.1 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 $558.7 million and reconciles to the net cost of operations of $79.2 million by deducting nonbudgetary resources, costs not requiring resources, and financing sources yet to be provided.

➤ Commissioner's hearing room at NRC headquarters in Rockville, Maryland.

SYSTEMS, CONTROLS, AND LEGAL COMPLIANCE

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

- Federal Managers' Financial Integrity Act of 1982
- Federal Financial Management Improvement Act of 1996
- Prompt Payment Act
- Debt Collection Improvement Act of 1996
- Biennial Review of User Fees
- Inspector General Act of 1978
- Other key legal and regulatory requirements

Federal Managers' Financial Integrity Act

The Federal Managers' Financial Integrity Act of 1982 (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. The act requires the Chairman to provide an assurance statement on the adequacy of management controls and conformance of financial systems with Governmentwide standards.

CHAIRMAN

Integrity Act Statement

The U.S. Nuclear Regulatory Commission evaluated its management controls and financial management systems for FY 2002, as required by the Federal Managers' Financial Integrity Act of 1982. On the basis of the NRC's comprehensive management control program, I am pleased to certify, with reasonable assurance, that the agency is in compliance with the provisions of this act.

Richard A. Meserve
CHAIRMAN
U.S. NUCLEAR REGULATORY COMMISSION
DECEMBER 24, 2002

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 an executive review committee. 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 General Accounting Office reports
- Reports and other information provided by the congressional committees of jurisdiction

A committee of agency executives, 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, met and reviewed these individual assurance statements. The committee then advised the Chairman whether NRC had any management control deficiencies serious enough to be reported as a material weakness or material non-compliance.

The NRC's ongoing management control program requires, among other things, that management control deficiencies be 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 2002 Integrity Act Results

The NRC evaluated its management control systems for the fiscal year ending September 30, 2002. 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 in its programmatic or administrative activities. However, the NRC's implementation of managerial cost accounting (SFFAS Number 4) was identified as a significant weakness that merits the attention of senior management. A prior-year deficiency on implementation of accounting for internal use software (SFFAS Number 10) was eliminated as a significant weakness.

The implementation of managerial cost accounting was reported as a significant weakness last year and continues to receive the close attention of senior management. Significant progress was made during FY 2002. A cost accounting system was implemented using commercial off-the-shelf software and quarterly internal cost reports were provided to agency managers as additional input to their decision-making activities. The agency will continue to refine its use of cost accounting.

Federal Financial Management Improvement Act

The Federal Financial Management Improvement Act of 1996 (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 2002 Improvement Act Results

As of September 30, 2002, the NRC evaluated its seven financial systems: the Federal Financial System (FFS), Human Resources Management System (HRMS), Managerial Cost Accounting, Capitalized Property System, License Fee Bill Generator System, Allotment/Financial Plan System, and Budget Formulation System. The NRC evaluated its financial management systems to determine if they complied with applicable Federal requirements and accounting standards required by the Improvement Act.

The Chairman of the NRC determined that as of September 30, 2002, NRC financial management systems were in substantial compliance with Federal financial management system requirements, except for instances where the managerial cost accounting system did not fully meet Governmentwide financial management systems requirements. In making his determination, the Chairman considered all the information available to him, including the Executive Committee on Management Control's report on the effectiveness of internal controls and the auditor's opinion on the agency's FY 2002 financial statements. He also considered the results of the financial management systems reviews conducted by the agency.

The following actions are underway during FY 2003 to improve the managerial cost accounting system:

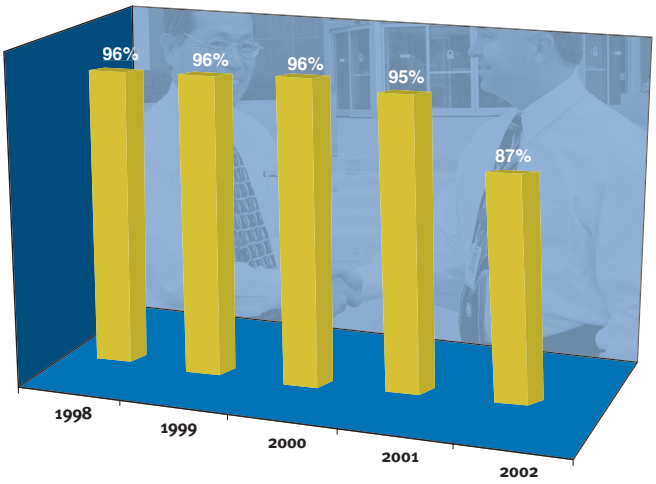
- Complete correction of deficiencies identified during the development and evaluation of the Security Plan Risk Assessment and Business Continuity Plan.
- Perform a post-implementation assessment of the system, identify areas for improved efficiency and effectiveness, and take appropriate action.
- Continue with cost management improvement activities related to assessing and refining the agency's needs for cost information.

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 2001 to FY 2002, the NRC had a decrease of 2,201 invoices (from 8,745 to 6,544) that were paid and subject to the Prompt Payment Act. For FY 2002, the NRC made 87 percent of its payments on-time that were subject to the Prompt Payment Act. The NRC incurred $6,992 in interest penalties in FY 2002, which was an increase over the FY 2001 amount of $3,151. The increase in interest penalties and decrease

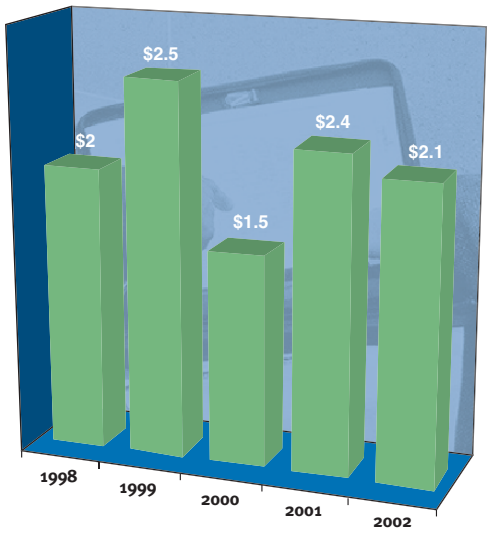
PROMPT PAYMENT

On-time payments



DELINQUENT DEBT

In millions



in prompt payment performance was due to severe mail disruptions caused by the National emergency as a result of the anthrax contamination of post offices that processed NRC mail. The agency made over 99 percent of its vendor payments electronically.

Debt Collection

The Debt Collection Improvement Act of 1996 was enacted 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 at less than one percent of its annual billings. The NRC continues to meet its goal and has kept delinquent debt at less than one percent for the past five years. Delinquent debt at the end of FY 2002 was $2.0 million. This is a decrease of $0.4 million over FY 2001; however, it reflects an increase in the number of outstanding receivables from 208 to 280. The NRC continues to aggressively pursue the collection of delinquent debt and continues to meet the requirement that all eligible delinquent debt over 180 days is referred to the U.S. Treasury for collection.

Biennial Review of User Fees

The Chief Financial Officers Act of 1990 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 2001 and FY 2002, the NRC reviewed each type of fee 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

➤ Zion Nuclear Power Plant, Zion, Illinois

described in the Federal Register (67 FR 42612, June 24, 2002). The following fees and charges were also revised to more appropriately recognize actual costs: fees for public use of the auditorium, administrative charges imposed on delinquent debt [10 CFR 15.37(f)], fees for search and review time to respond to Freedom of Information Act and Privacy Act requests, and license fees based on average number of hours. Reviews of other types of fees concluded that fee revisions were not warranted at this time.

Treasury Performance Measure Summary

Treasury has five key elements for measuring how agencies complied with reporting requirements for FACTS I (trial balance) and intragovernmental activity. Overall for FY 2001, 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 2002 Performance Measure Summary.

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 of 1978, as amended, 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 B.

Improper Payments

The General Accounting Office (GAO) reported that improper payments are a widespread and significant problem in the Federal Government. The NRC was requested to evaluate its own internal controls and to implement those strategies that are appropriate to guard against improper payments. The NRC's evaluation disclosed that its instances of improper payments was minimal and that NRC has effective management controls designed to prevent improper payments.

Payment data for the period October 2000 to September 2002 was collected and analyzed to determine the number and dollar value of improper payments compared to total payments made. The results showed that there were 100 improper payments out of 103,724 total payments, or 0.1 percent. The dollar value of improper payments was $135,626 out of $409,728,369 total dollars, or 0.03 percent. This data supports the NRC's initial assessment that improper payments are an area of low management control risk. The agency will continue to monitor improper payments.

➤ Fort Calhoun Nuclear Power Plant, Omaha, Nebraska

CHAPTER 2:
PROGRAM PERFORMANCE

INTRODUCTION

Measuring and Reporting Our Performance

This chapter presents information on NRC program performance during FY 2002. The presentation begins with a discussion of an agencywide evaluation of the NRC's security and safeguards programs to address homeland security during FY 2002 in response to the terrorist attacks on September 11, 2001. The discussion of program performance centers on each of NRC's four operating arenas: Nuclear Reactor Safety, Nuclear Materials Safety, Nuclear Waste Safety, and International Nuclear Safety Support. The discussion of program performance in each arena presents a brief overview of the key programs and some of their major accomplishments. The discussion also includes program performance results for NRC goals and measures, along with relevant budget information and the results of program evaluations or studies completed during FY 2002.

Our Performance Measurement System

The NRC has adopted a performance measurement system which has both strategic goals and strategic goal measures as well as performance goals and performance goal measures. The strategic goals represent the mission of the agency and reflect the overall outcomes to be achieved.

Our performance goals are the key contributors to achieving the strategic goals and focus on outcomes. The performance measures associated with each goal indicate how effectively the NRC is achieving its performance 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 performance goals. The NRC is currently reviewing performance measures as part of the triennial update of the Strategic Plan to determine if the NRC can find more effective ways to measure and report its performance to the American public.

Performance Data Completeness and Reliability

Assessing the reliability and completeness of performance data is critical to managing for results. Comparisons of actual performance with the projected levels of performance are possible only if the data used to measure performance are complete and reliable. The Reports Consolidation Act of 2000 requires that the Chairman of the NRC assess the completeness and reliability of the performance data used in this report. The Office of Management and Budget (OMB) Circular No. A-11 describes specifically how an agency should assess the completeness and reliability of the performance data.

Data Completeness

Data are considered complete by the Office of Management and Budget if actual performance data are reported 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 report is sent to the President and Congress. The data in this report meets OMB's requirements for data completeness. Actual or preliminary data have been reported for every strategic and performance goal measure.

Data Reliability

Data are considered reliable by the Office of Management and Budget when there is neither a refusal nor a marked reluctance by agency managers or decision makers to use the data in carrying out their responsibilities. Agency managers and decision makers at the NRC use the data contained in this report on an ongoing basis in the normal course of their duties. There is neither a refusal nor a marked reluctance by managers or decision makers in this agency to use the data in carrying out their responsibilities. The data in this report meets OMB's requirements for data reliability.

➤ The NRC Operations Center

HOMELAND SECURITY

For over 25 years, NRC regulations have required that major NRC licensees maintain rigorous security programs. These facilities are among the best defended and most hardened commercial facilities in the Nation. As a result of the September 11, 2001 terrorist attacks, the Commission launched a comprehensive evaluation of the security and safeguards programs of nuclear power plants and nuclear materials facilities. Although this work is ongoing, a series of significant actions were undertaken during FY 2002 to enhance the security of NRC licensee's facilities.

Security Improvements

Immediately following the attacks, the NRC issued a series of safeguards and threat advisories to the major licensed facilities placing them on the highest security level. Security across the nuclear industry was enhanced as a result of these actions, and many of the strengthened security measures became permanent requirements during FY 2002. The security enhancements include measures to provide additional protection against vehicle bombs, as well as waterborne and land-based assaults. They include requirements for increased security patrols, augmented security forces, additional security posts, increased vehicle standoff distances, tightened facility access controls, and enhanced coordination with the law enforcement and intelligence communities.

The NRC, in coordination with the intelligence and law enforcement community, also placed special emphasis on strengthening access controls at nuclear facilities. During FY 2002, we worked with the FBI and the industry to review access lists of employees working at nuclear power plants so as to identify any individual whose name matched the FBI Watch List. No positive matches were identified.

NRC regulations require that individuals having unescorted access to nuclear power plants undergo a background investigation that includes credit checks, employment history, reference examination, psychological testing, and a criminal history check conducted by the FBI. Orders issued during FY 2002 to certain licensees require additional measures, including severe limitations on temporary unescorted access to sensitive areas of these facilities.

During FY 2002, the Commission completed an initial assessment of power reactor vulnerabilities to intentional malevolent use of commercial aircraft in suicidal attacks and initiated a broad-ranging research program to understand the vulnerabilities of various classes of facilities to a wide spectrum of attacks. In addition, the Commission began a series of bilateral exchanges with our allies on nuclear security vulnerabilities and potential mitigating measures. Although our work in this area is ongoing, the Commission directed nuclear power plant licensees to develop specific plans and strategies to respond to an event that could result in damage to large areas of their plants from impacts, explosions or fire during FY 2002. In addition, licensees are required to provide assurance that their emergency planning resources are sufficient to respond to such an event.

In cooperation with other Federal agencies, the Commission began development of revisions to the design basis threat that provides the foundation for the security programs of nuclear power plant licensees during FY 2002. The Commission's Orders

to these licensees in February 2002 effectively enhanced security on an interim basis while this work is underway. Full security performance reviews, including force-on-force exercises, will now be carried out at each nuclear power plant on a three-year cycle instead of the eight-year cycle that had been used prior to September 11, 2001. These reviews commenced with tabletop exercises for the first time involved a wide array of Federal, State and local law enforcement and emergency planning officials.

Establishment of the Office of Nuclear Security and Incident Response

In April 2002, the Office of Nuclear Security and Incident Response (NSIR) was established to improve communications and coordination on security and safeguards issues both within and outside the NRC. NSIR is responsible for developing overall safeguards and security policies and is our central point of contact with the Department of Homeland Security. The office also contains an Incident Response Organization, including the NRC Headquarters Operations Center, and coordinates with Federal response and law enforcement agencies. It also directs NRC information security and secure communications activities.

The establishment of NSIR enhanced the NRC's level of interaction with other Federal agencies, State and local governments, as well as the international community. The Commission's ability to communicate critical, time-sensitive information with licensee sites has also been enhanced. Secure telephones have also been placed in all of our resident inspectors' offices at nuclear power plants. We will soon install secure FAX capabilities in these offices as well.

During FY 2002, around-the-clock operations of the NRC Headquarters Operations Center was maintained, ensuring that a cadre of experts were on call to respond to emergencies. The Incident Response Program also augmented its communication capability between and among Incident Response Centers in our regional offices, and enhanced coordination with other Federal agencies.

During FY 2002, the NRC implemented a new Threat Advisory and Protective Measures System in response to Homeland Security Presidential Directive-3. When a new Homeland Security Advisory System threat condition is declared, the NRC will promptly notify affected licensees of the condition and refer them to the predefined protective measures. The new system for NRC licensees has been formally communicated to licensees, Governors, State Homeland Security Advisors, Federal agency administrators and other appropriate officials. The new system replaces the NRC's 1998 threat advisory system and covers additional classes of licensees not included in NRC's 1998 system.

Headquarters Security

The Commission also specified actions for enhancing security at NRC Headquarters. Consistent with the current Yellow (elevated) threat condition, the NRC enhanced its Headquarters physical security by increasing the number of armed guards, installing perimeter security barriers, and strengthening access controls. Additionally, special mail handling equipment was installed. A comprehensive redesign of our Web site was conducted to restrict access to sensitive but unclassified information, while allowing continued communication with the public on a wide variety of our non-sensitive activities.

➤ Oconee Nuclear Power Plant, Greenville, South Carolina

Defenses Against Terrorist Use of Radiological Dispersal Devices

In FY 2002, the Commission was also actively involved in efforts to defend against possible terrorist use of radiological dispersal devices. Prior to September 11, 2001, the NRC had initiated two programs aimed at reducing the risk of loss of control of radioactive materials. The NRC is helping to fund efforts by the Conference of Radiation Control Program Directors to identify, recover, and manage the proper disposition of unwanted discrete radioactive sources and devices. The NRC also initiated a program to increase the control of, and accountability for, generally licensed devices through a registration program for certain devices.

NRC alerted licensees, suppliers, and shippers of the need to enhance security against the threat of theft of radioactive material during FY 2002. In addition, the NRC began conducting a comprehensive evaluation of controls to protect those radioactive materials that constitute the greatest hazard to public health and safety. The NRC established a joint working group with the Department of Energy to evaluate approaches for "cradle-to-grave" control of radioactive sources that might be used in a radiological dispersal device. As part of the evaluation, the NRC began working with the Agreement States to establish a consolidated listing of higher-risk materials licensees that may be subject to additional requirements for security measures. The NRC also worked with the then Office of Homeland Security and other agencies to ensure that the Federal Government is prepared to respond to an event involving a radiological dispersal device. The NRC also began reexamining its import and export licensing procedures and is working with the International Atomic Energy Agency to establish a code of conduct for licensing such materials.

Legislative Proposals

NRC provided legislative proposals to Congress detailing specific initiatives that would further enhance security of NRC-licensed facilities and activities during FY 2002. These proposals address a spectrum of activities. One provision would authorize guards at NRC-regulated facilities to use deadly force to protect property significant to the common defense and security. This would give guards protection from State criminal prosecution for actions taken during the performance of their official duties. Another provision would allow the Commission, in consultation with the Attorney General, to confer upon guards at NRC-designated facilities the authority to possess or use weapons that are comparable to those used by the Department of Energy's guard forces. Some State laws currently preclude private guard forces at NRC-regulated facilities from utilizing a wide range of weapons. Another provision would make it a Federal crime to bring unauthorized weapons and explosives into NRC-licensed facilities and would make Federal prohibitions on sabotage applicable to the operation and construction of certain nuclear facilities.

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 focus of the Nuclear Reactor Safety arena is to ensure that civilian nuclear power reactors, as well as test and research reactors, are operating in a manner that adequately protects public health and safety and the environment and that safeguards special nuclear material used in reactors. The NRC regulates 104 nuclear power reactors and 36 test and research reactors that are licensed to operate. The primary purpose of test and research reactors is to safely conduct research and development. Almost every field of science, including physics, chemistry and biology, uses these reactors.

The Commission's health and safety regulations seek to provide reasonable assurance of adequate protection of the public health and safety. The 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 to maintain safety. The NRC licensees are responsible for designing, constructing, and operating nuclear reactors safely. Regulatory oversight of licensees is the responsibility of the NRC.

Ensuring the Safe Operation of Nuclear Reactors

The NRC seeks to ensure the safety of nuclear reactors by licensing nuclear power plants and their operators, providing oversight of plant operating performance, maintaining a security and emergency response program, establishing clear health and safety regulations, and conducting research to resolve safety issues and provide technical support for developing regulations. The Nuclear Reactor Safety arena consists of programs that work together to achieve the safety goals. Nuclear plant licensees are required to follow regulations specifying how plants are to be designed, constructed and operated. The NRC provides independent oversight of the plants through the reactor oversight process to verify that they are being operated safely in accordance with NRC rules and regulations. If violations are found, the NRC may take enforcement actions. The security and emergency response programs ensure that adequate measures are taken to thwart attacks on 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 licensing program seeks to ensure that operating nuclear power plants maintain adequate protection of public health and safety throughout the plant's operating life. 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.

NRC licensing activities include the review of license applications and changes to existing licenses, examining and licensing reactor operators, reviewing reactor events for safety significance, and improving safety regulations and guidance.

➤ Nuclear power plant steam turbine.

Included in the licensing actions are responses to licensee requests to change or amend their licenses in areas such as license transfers, power uprates, initiatives involving risk-informed regulation, and voluntary conversions of plant technical specifications to an improved standard format.

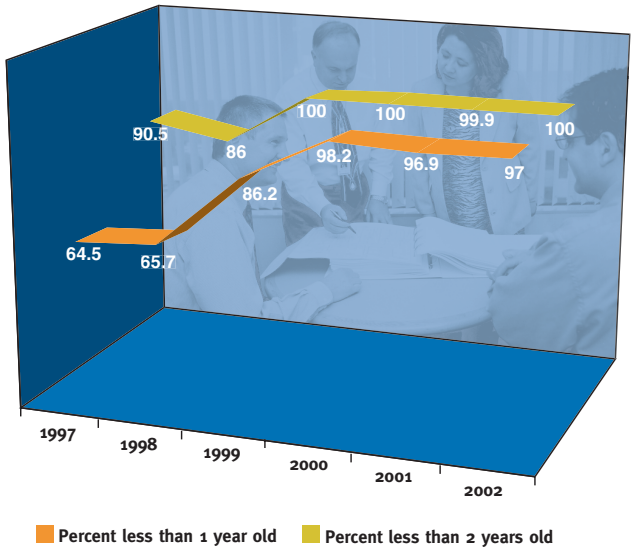
License Transfers

The NRC engaged in significant financial review activities for nuclear power plants because a number of States have taken steps toward deregulation of the power market, the unbundling of services, and general industry consolidation. The cases involved such issues as the sale of a passive owner's minority share and the creation of a separate holding company. In 2001, the NRC completed 15 license transfer applications affecting 41 plants. In 2002, the agency received 11 applications affecting 21 plants. Of the 11 applications, 6 were completed, 3 were withdrawn, and 2 were under review as of December 2002. The NRC has established an ambitious six-month target for completing license transfer/actions and has generally met that goal.

Power Uprates

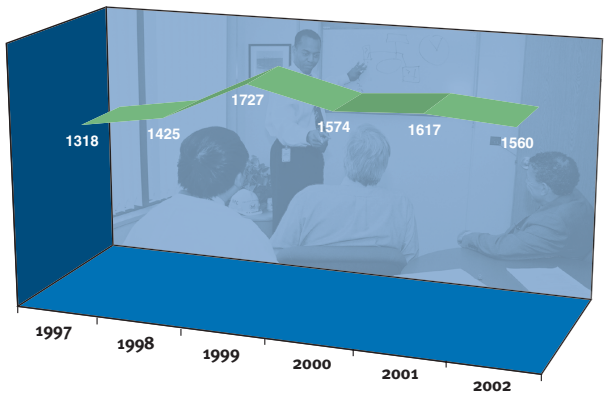
Licensees have been applying for and implementing power uprates since the 1970s as a way to increase the power output of their plants. The staff has been conducting power uprate reviews from the inception of these initiatives and, as of October 1, 2002, had completed 81 such reviews. An equivalent of three large nuclear power plants, or 3,853 Megawatts electric (MWe), has been gained through implementation of power uprates at existing plants. In FY 2002, the staff completed reviews for power uprates at 17 units. These uprates increased electrical generating capacity by about 1,320 MWe.

AGING OF LICENSING ACTIONS



➤ The licensing program's timeliness in responding to license requests has improved since 1997. In 1997, 65 percent of licensee actions were handled within one year or less. At the end of FY 2002, 97 percent of licensing actions in the working inventory were less than one year old.

LICENSING ACTIONS COMPLETED



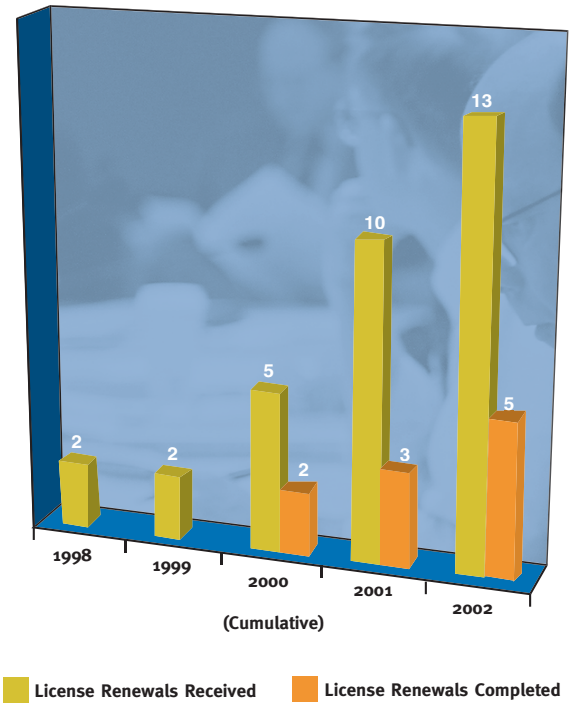
➤ The NRC met or exceeded all established measures for completing nuclear power plant licensing-related actions during FY 2002. NRC staff completed 1,560 licensing actions in FY 2002.

New Reactor Licensing

With increasing interest on the part of the nuclear industry in possibly constructing new reactors, the NRC has assigned staff to work on new reactor licensing activities. In FY 2002, the staff completed an assessment of its readiness to license and inspect new reactors. A proposed update to regulations governing early reactor site permits, standard reactor design certifications, and combined licenses was developed. Early site permit reviews consider site safety and environmental issues, and plans for coping with emergencies, independent of the review of a specific reactor design. Design certification reviews consider the safety of a reactor design, independent of a specific site. A combined license authorizes construction and conditional operation of a nuclear power plant, and may reference a certified design and/or early site permit.

A preapplication review of the Westinghouse AP 1000 reactor design was completed, with Westinghouse applying for certification of this design on March 28, 2002. This application is currently under review. Meanwhile, three companies have stated they intend to submit early reactor site permit applications. The NRC has begun preapplication reviews of three reactor designs; the Simplified Boiling Water Reactor (General Electric's ESBWR design), Siedewasserreaktor (Framatome ANP's SWR-1000), and Advanced CANDU Reactor (Atomic Energy of Canada, Limited's ACR-700), were initiated during FY 2002 while preapplication review of the General Atomics GT-MHR gas-cooled reactor design continued.

LICENSE RENEWAL APPLICATIONS



➤ The NRC met or exceeded all established schedules for completing license renewal reviews in FY 2002. The agency issued renewed licenses for Hatch Units 1 and 2, and Turkey Point Units 3 and 4 in FY 2002.

License Renewal

The Reactor License Renewal program implements the technical and regulatory requirements for the renewal of 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 is maintained for the extended period of operation. When reviewing a license renewal application, the NRC performs a comprehensive review that focuses on passive structures and components of the plants that are subject to the

➤ Inspection at a Nuclear Power Reactor.

effects of aging to ensure that the licensee has programs and processes in place to manage these effects.

The license renewal review program is proceeding aggressively. To date, the agency has received thirteen applications. Five applications, covering ten units, have been approved and the licenses have been renewed as of the end of FY 2002. Eight applications, for an additional sixteen units, are currently under review. The NRC expects that almost all of the 104 currently licensed units will ultimately apply to renew their licenses.

Reactor Inspection and Performance Assessment Program

The NRC provides oversight of plants through its reactor oversight process (ROP) to verify that nuclear plants are being operated safely in accordance with NRC 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 a plant shutdown.

The ROP uses both inspection findings and performance indicators (PIs) to assess the performance of each plant within a regulatory framework of seven cornerstones of safety. 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 PI information, as well as industry-level indicators, on its Web site. The NRC also conducts public meetings with licensees to discuss the results of the agency's assessment of licensees' performance.

The ROP is designed to maintain safety more effectively by focusing staff and industry attention on risk-significant activities while reducing unnecessary regulatory burden on the licensees. The ROP was revised in the late 1990s to be more risk-informed, and the second full cycle of assessments using the revised ROP was completed during FY 2002. Key features of the process included development of a risk-informed regulatory framework. This framework is comprised of risk-informed inspections, a significance determination process to evaluate inspection findings, licensee-reported performance indicator information, and streamlined assessment and enforcement activities.

Davis-Besse Inspection Results

In March 2002, FirstEnergy Nuclear Operating Company, the licensee, discovered a cavity in the reactor pressure vessel (RPV) head at the Davis-Besse Nuclear Power Station. The NRC dispatched an augmented inspection team to gather facts about the event. The agency documented the results of the inspection in NRC Inspection Report No. 50-346/02-03, dated May 3, 2002. As a result, the NRC issued two bulletins to all pressurized water reactor (PWR) licensees. The first bulletin instructed licensees to report on the condition of the RPV head, past incidents of boric acid leakage, and the basis for concluding that their boric acid inspection programs were effective. The second bulletin advised the licensees of the need for more stringent inspection techniques in the examination of their vessel heads. A task force was formed to review NRC regulatory practices as a result of this significant plant event. The Davis-Besse Lessons Learned Task Force issued its report on September 30, 2002, and the agency is using the report to develop future agency actions.

CONTINUED ON PAGE 34

Industry Safety Indicators[1]

The ultimate measure of NRC's programs in the Nuclear Reactor Safety arena is the continued safe operation of 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 included below and on the next page. These indicators show significant improvement in the safety performance of nuclear power plants since 1988.

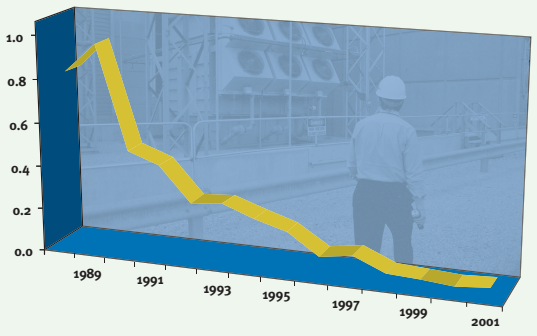
This improvement in the safety performance of nuclear power plants is the result of the combined efforts of the nuclear industry and the NRC and the additional experience both have gained in the operation and maintenance of nuclear power facilities.

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.

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. The NRC oversees plant operating performance and will not allow licensees to operate their plants if safety performance falls below acceptable levels.

SIGNIFICANT EVENTS

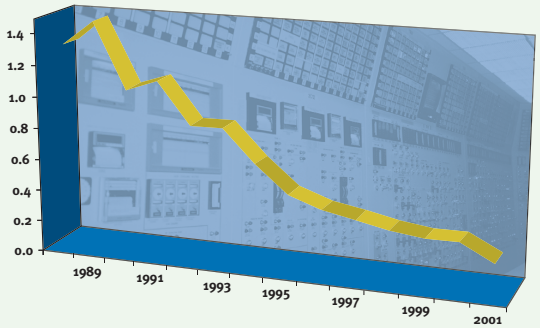
Per reactor



➤ Significant events meet specific criteria, such as degradation of important safety equipment. The NRC staff reviews operating events and assesses their safety significance. The number of significant events has declined since 1989.

SAFETY SYSTEMS ACTUATIONS

Per reactor

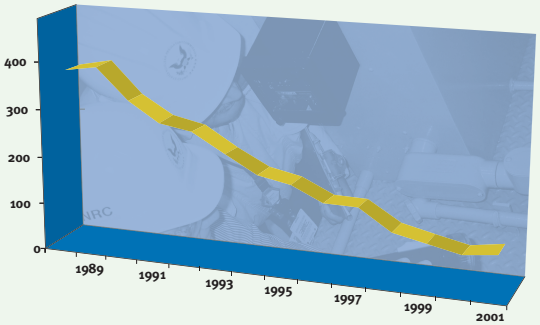


➤ Safety systems mitigate off-normal events by providing reactor core cooling and water addition. Actuations of safety systems that are monitored include certain emergency core cooling and emergency electrical power systems. Actuations can occur as a result of "false alarms" such as testing errors or in response to actual events. The number of safety system actuations has declined since 1989.

NUCLEAR REACTOR SAFETY

COLLECTIVE RADIATION EXPOSURE

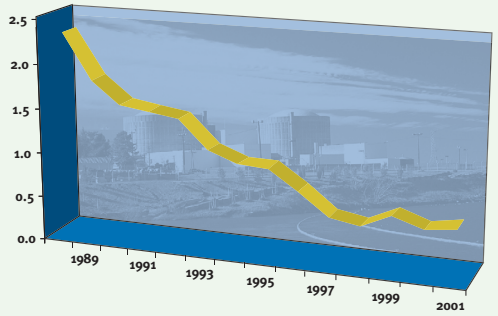
Exposure (Person-centisievert)



➤ The total radiation dose received by workers at nuclear plants is an indicator of the effectiveness of the controls on personnel radiation exposure. Worker radiation dose shows a significant reduction since 1989.

AUTOMATIC SCRAMS

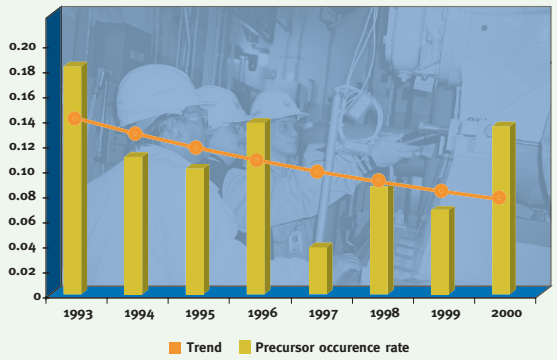
Per reactor



➤ 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 number of scrams has declined steadily since 1988.

PRECURSOR OCCURRENCE RATE

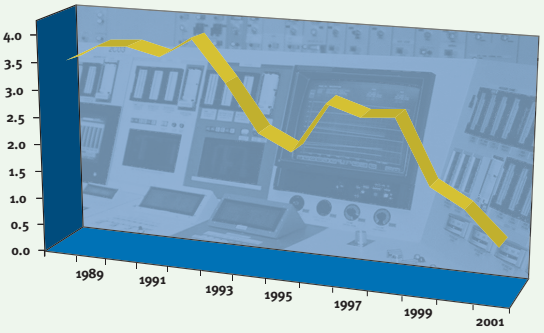
Per reactor per year



➤ The NRC staff 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. The occurrence rate of precursor events declined during the period from 1993 to 2000. A "significant" precursor event has a probability of 1 in 1,000 or greater of leading to substantial damage to the reactor fuel. No "significant" precursor events have been identified between 1996 and 2000.

SAFETY SYSTEM FAILURES

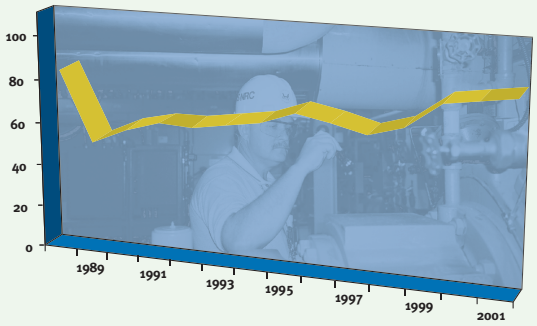
Per year



➤ Safety system failures are any events or conditions that could prevent the fulfillment of a safety function by a safety system. The total number of safety system failures across the industry has declined since 1992.

AVERAGE NUCLEAR REACTOR CAPACITY FACTOR

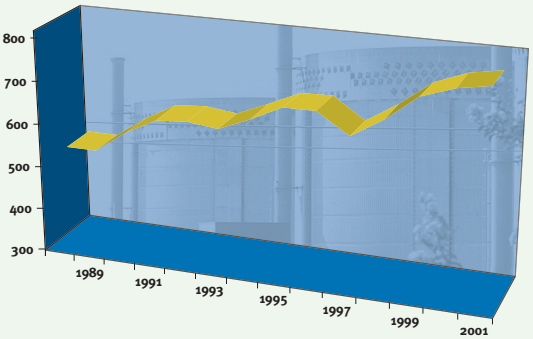
Percent



➤ The average annual reactor capacity factor has increased from 62 percent in 1987 to 90 percent in 2001. *Source: DOE/EIA Monthly Energy Review*

NUCLEAR POWER GENERATION

Gigawatt Hours



➤ Improvements in nuclear reactor safety have occurred at a time when nuclear power generation has increased significantly, from 455,000 gigawatt hours in 1987 to 767,000 gigawatt hours in 2001. *Source: DOE/EIA Monthly Energy Review*

CONTINUED FROM PAGE 31

The plant remains shut down for replacement of the reactor vessel head and for broad safety reviews and performance improvement activities. NRC approval is required before the plant can restart.

Safety Research

The NRC's reactor research program resolves safety issues for nuclear power plants, assesses the effectiveness of selected NRC programs, evaluates operational events to identify precursors to accidents, proposes regulatory improvements, and coordinates the development of consensus and voluntary standards for agency use. The agency conducts its research programs to reduce uncertainties in areas of potentially high risk or safety significance and to develop the technical basis to support realistic safety decisions. Where possible, the NRC engages in research cooperatively with the Department of Energy (DOE), the nuclear industry, universities, and international partners. The research program includes the key areas of risk analysis, structural integrity research, new reactors, and digital safety systems research.

Risk Analysis

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 agency efforts to use risk information in all appropriate aspects of regulatory decisionmaking, apply risk assessment technology to resolve safety issues, develop a risk-informed regulatory framework, and focus regulatory activities on the most risk-significant aspects of licensed activities. The research program strives to improve risk technology and modeling techniques, reduce uncertainties, and develop improved data.

Fuel and Thermal-Hydraulic Research

The NRC is conducting studies of fuel behavior with advanced cladding and at high burn-up. Confirmatory experimental work ensures that safety is maintained as the industry seeks the economies of advanced fuel designs and high utilization (burn-up). The experimental program, along with analytic methods under development, will establish new safety limits for energy deposition and clad oxidation during postulated accidents. The NRC, international community and industry are co-funding much of this work to achieve significant efficiencies.

The NRC has completed a Phenomenon Identification and Ranking Table Report that identifies and assesses source term issues for high burnup and mixed-oxide (MOX) fuels. Also, the agency developed the neutronics code, PARCS, and applied it to the analysis of the control rod ejection accident for reactor cores containing MOX fuel assemblies.

The NRC has an extensive thermal-hydraulic program comprising experimental testing, model development, and validation. The application of these models and experimental results provide the technical basis for risk-informing the regulations and for addressing safety issues. Analysis of hydrogen generation during a severe accident using NRC-developed models provides the technical basis for risk informing combustible gas control requirements (10 CFR 50.44). Models used in the analysis of small and large break-loss-of-coolant-accidents provide the basis for risk informing the regulations and acceptance criteria for emergency core cooling systems (10 CFR 50.46). In FY 2002, the NRC completed work to support the risk-informed revision of several emergency core cooling system requirements.

➤ Nuclear power plant control room

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 nuclear power plant operation. Several current 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, degradation mechanisms, methods to evaluate performance of degraded components, and methods to repair and mitigate the potential effects of these conditions. This research has been a key factor in developing regulatory strategies to address aging effects, including cracking of steam generator tubes, piping systems, and the reactor pressure vessel head penetrations, and has helped establish the technical bases to support reactor license renewal.

These programs, performed with international collaboration efforts, effectively leverage NRC resources and provide data for verification of analytical methods and realistic assessment of the structural capacity for use in risk assessments.

New Reactor Research

Because of the nuclear industry's increasing interest in new reactors, the NRC has initiated research activities to respond to requests for preapplication interactions on advanced reactor designs. The research activities include identifying the safety issues and research needs for the advanced designs and developing the necessary infrastructure (i.e., the technical bases to support NRC review of these advanced designs).

Digital Safety Systems Research

The instrumentation and control (I&C) systems originally installed in nuclear power plants used analog technology. These systems have become obsolete and replacement components are increasingly costly and difficult to obtain. Therefore, licensees are beginning to upgrade their I&C systems with software-based digital control systems. Several current projects provide the technical basis for 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 radiofrequency 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 would be expected to use advanced digital I&C 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.

Strategic Goal		Results					
		FY02	FY01	FY00	FY99	FY98	FY97
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 Measures:** ➤ 1. No nuclear reactor accidents.[2] ➤ 2. No deaths resulting from acute radiation exposures from nuclear reactors.[3] ➤ 3. No events at nuclear reactors resulting in significant radiation exposures.[4] ➤ 4. No radiological sabotages at nuclear reactors.[5] ➤ 5. No events that result in releases of radioactive material from nuclear reactors causing an adverse impact on the environment.[6] **Results:** All of the strategic goal measure targets were met.	●	●	●	●	●	●

KEY:

● Indicates goal was achieved.

■ Indicates goal was partially achieved or was not achieved but significant progress was made.

✦ Indicates goal was not achieved.

ANNUAL GOALS AND MEASURES

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.

RESULTS

The NRC has identified five measures to determine if it has met its strategic goal. These are top-level measures that define the agency's success in overseeing reactor licensees. The goal of our regulatory efforts is to prevent the occurrence of any of these events. The NRC has met all of its strategic goal measures since GPRA reporting began in 1997.

PERFORMANCE GOALS

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

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 1.		Results					
		FY02	FY01	FY00	FY99	FY98	FY97
Maintain safety, protection of the environment, and the common defense and security.	**Performance Measures:** ➤ 1. No statistically significant adverse industry trends in safety performance.[7] ➤ 2. No more than one event per year identified as a significant precursor of a nuclear accident.[8] ➤ 3. No events resulting in radiation overexposures from nuclear reactors that exceed applicable regulatory limits.[9] ➤ 4. No more than three releases per year to the environment of radioactive material from nuclear reactors that exceed the regulatory limits.[10] ➤ 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] **Results:** All of the performance goal measure targets were met.	●	●	●	●	●	●

KEY:

● Indicates goal was achieved.

■ Indicates goal was partially achieved or was not achieved but significant progress was made.

✦ Indicates goal was not achieved.

Performance Goal 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 are of 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 FY 2002 data are preliminary.

Significant Precursors: The second measure tracks significant precursor events. A "significant" precursor event is defined as an event that has a probability of 1 in 1,000 or greater of leading to substantial damage to the reactor fuel. No significant precursor events have been identified since 1996. The FY 2002 data are preliminary.[12]

Overexposures: The third measure tracks individual radiation overexposures within any nuclear power plant. Radiation levels are monitored carefully within the plant, 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. There have been no instances of radiation exposures that exceed regulatory limits since 1997. The FY 2002 data are preliminary.

Releases to the Environment: In addition to the NRC's duty to ensure the 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

Performance Goal 2.		Results					
		FY02	FY01	FY00	FY99	FY98	FY97
Increase public confidence.	**Performance Measures:** ➤ 1. Complete milestones relating to collecting, analyzing, and trending information for measuring public confidence. ➤ 2. Complete all public outreach activities. ➤ 3. Complete the milestones specifice to the agency allegation program effectiveness assessment plan. (This performance measure will be deleted in FY 2003.) ➤ 4. Issue Director's Decisions for petitions filed to modify, suspend, or revoke a licsnes under 10 CFR 2.206[13] within an average of 120 days.[14] **Results:** Performance goal measure targets for the first three performance measures were met. The target for the fourth performance measure was not met since Director's Decisions were issued in an average of 126 days.	●	●	●	●	●	●

KEY:
- ● Indicates goal was achieved.
- ■ Indicates goal was partially achieved or was not achieved but significant progress was made.
- ✦ Indicates goal was not achieved.

limits. Any releases below these limits would not be expected to harm an individual or the environment. There have been no releases of nuclear material into the environment that exceed regulatory limits since 1997. The FY 2002 data are preliminary.

Security: The fifth measure reflects the effectiveness of NRC regulations that are designed to promote physical security of nuclear plants. Any breakdowns of security are reported and an information assessment team is dispatched to investigate the incident. Since 1997, there have been no breakdowns of physical security that significantly weaken protection against sabotage, theft, or diversion of special nuclear materials. The FY 2002 data are preliminary.

Performance Goal 2

Public Confidence: The NRC met the milestone to develop recommendations on methods to assess public confidence. The NRC completed the pilot program to determine the usefulness of the public meeting feedback forms in assessing the effectiveness of NRC's public meeting process. The NRC has decided to keep the feedback forms as a tool to measure public confidence since it helps the agency to improve its interactions with the public. The NRC compiled and analyzed the results of all the feedback forms for the entire period of the pilot program from September 2000 to February 2002. In the more than 922 public meetings held during this period the public comments ranged from very positive to very critical. For example, 70 percent of respondents were familiar (28 percent somewhat familiar) with the meeting topic prior to attending and 55 percent have attended more than five NRC meetings. Eighty-one percent of respondents indicated that attendees' questions were answered clearly, completely, and candidly, and 11 percent indicated they were not.

Public Outreach: Public outreach meetings give the public opportunities for meaningful participation in NRC activities. For the second measure, the NRC held all five of the scheduled public outreach meet-

➤ NRC inspectors onsite at a nuclear power plant

ings associated with this measure and collected and considered feedback from the public. The NRC used this information to define the scope and possible environmental impacts of license renewal activities.

Allegation Program Assessment: The FY 2002 milestone for the third performance measure was for the NRC staff to submit an analysis of the pilot program survey to ascertain how NRC did in responding to allegers and addressing their concerns. The Commission has decided to discontinue using the survey as a means of measuring the effectiveness of the allegation program. This decision was based primarily on the fact that the latest survey did not provide any new insights and other methods of feedback provide adequate information on the effectiveness of the program. As a result, this performance measure is being deleted for FY 2003. However, the NRC will continue to solicit comments from allegers in closure letters. The NRC will also monitor feedback received from allegers and reconsider the need for a survey if that feedback begins to indicate that systemic problems are arising.

Director's Decisions: The fourth measure assesses the extent to which Director's decisions are handled expeditiously. Under 10 CFR 2.206, any member of the public can submit a petition asking the NRC to take an enforcement action against a licensee. The Director's Decision is the NRC's acceptance or denial of the petitioner's request. During FY 2002, Director's Decisions were issued within an average of 126 days, which did not meet the target of 120 days.

Failure to meet the target resulted from several petitions related to nuclear plant security that were filed following the terrorist attacks on September 11, 2001. In response to the terrorist attacks, the NRC proposed additional security measures for nuclear power plants. The NRC delayed Director's Decisions until the measures were reviewed and approved so as to ensure that decisions conformed to the new NRC policies.

Performance Goal 3

Risk-Informed Regulation: The first measure focuses on progress in developing a coordinated approach to implementing risk-informed decisions throughout the

Performance Goal 3.		Results					
		FY02	FY01	FY00	FY99	FY98	FY97
Make NRC activities and decisions more effective, efficient, and realistic.	**Performance Measures:** ➤ 1. Complete specific reactor milestones in the Risk-Informed Regulation Implementation Plan. ➤ 2. Complete at least two key process improvements per year in selected program and support areas that increase efficiency, effectiveness, and realism. ➤ 3. Complete all license renewal application reviews within 30 months. **Results:** All of the performance goal measure targets were met.	●	●	●	●	●	●

KEY:

● Indicates goal was achieved.

■ Indicates goal was partially achieved or was not achieved but significant progress was made.

✦ Indicates goal was not achieved.

agency's regulatory processes. The NRC completed the milestones in the risk-informed regulation implementation plan on schedule. The milestones included submitting the proposed rule for combustible gas control (10 CFR 50.44) to the Commission in May 2002, and the proposed rule for risk-informed categorization and treatment of structures, systems, and components (10 CFR 50.69) in September 2002. In addition, the NRC issued the generic safety evaluation for risk-management technical specifications for public comment in July 2002.

Process Improvements: The second measure concerns actions to improve NRC internal processes. During FY 2002, the agency improved its processes in two key aspects of the Nuclear Reactor Safety arena. First, it gained efficiency in the license renewal process. Second, it improved efficiency and effectiveness in reviewing measurement uncertainty recapture (MUR) power uprates.

The first process improvement seeks to achieve a 30 percent efficiency gain in resources needed to review license renewal applications. To achieve the 30 percent goal, the NRC issued improved implementation guidance in a license renewal regulatory guide and the standard review plan. The NRC expects that use of the improved guidance will enhance the efficiency and effectiveness of the renewal process by focusing the information provided by the applicant on situations where augmentation of existing programs is required or a plant-specific program is needed. The first application to be prepared using the improved guidance was filed in the second quarter of 2002.

For the second process improvement, the NRC evaluated the MUR power uprate application and review process. It was determined that the process would be improved if guidance was issued specifying staff information needs. It is expected that the process will be improved because requests for additional information will be minimized for applications that follow this guidance.

License Renewals: The third measure is to ensure license renewal reviews are handled expeditiously. The NRC completed two license renewal reviews, for four units, in FY 2002. It issued renewed licenses for Hatch, Units 1 and 2, in approximately 23 months and the renewed licenses for Turkey Point, Units 3 and 4, were issued in approximately 21 months. The NRC developed and issued guidance based on public interactions with external stakeholders. For example, in the development of the Regulatory Guide, the generic aging lessons learned, and the standard review plan, there was extensive public interaction.

Performance Goal 4.		Results					
		FY02	FY01	FY00	FY99	FY98	FY97
Reduce unnecessary regulatory burden on stakeholders.	**Performance Measures:** ➤ 1. Complete specific milestones to reduce unnecessary regulatory burden. **Results:** The performance goal measure target was met.	●	●	●	●	●	●

KEY:

● Indicates goal was achieved.

■ Indicates goal was partially achieved or was not achieved but significant progress was made.

✦ Indicates goal was not achieved.

Performance Goal 4

The milestone for this measure was to implement several initiatives for reducing unnecessary regulatory burden. The NRC expects to complete the initiatives in FY 2004.

One of the strategies in the NRC's Strategic Plan is to actively seek stakeholder input to identify and discuss opportunities for reducing unnecessary regulatory burden. The agency held a workshop in May 2001 for that purpose. Discussions with stakeholders were held during FY 2002, and an initiative was developed to review various licensee requirements to determine which ones could be modified to reduce unnecessary regulatory burden. The initiative also seeks to identify and address regulations that are obsolete or involve paperwork requirements. The initiative is described in SECY-02-0081, "Staff Activities Related to The NRC Goal of Reducing Unnecessary Regulatory Burden on Power Reactor Licensees." The issuance of SECY-02-0081 and the related direction from the Commission to the NRC staff fulfilled the milestones established for FY 2002. The NRC revised the initiative and related milestones in response to stakeholders' suggestions to avoid collecting additional information to support burden reduction efforts. The NRC began the initiative in FY 2002 and will pursue the associated rulemakings and related activities during FYs 2003 and 2004.

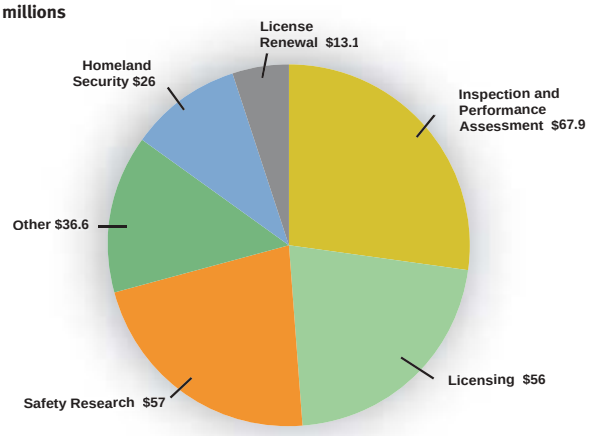
Although not specifically included in the milestones for reducing unnecessary regulatory burden, the NRC is also continuing many initiatives that contribute to this performance goal. These include license amendments, power uprates, electronic information exchange, improved requirements in technical specifications for specific plants, and an improved reactor inspection and oversight process.

FUNDING

The Nuclear Reactor Safety budget, totaling $256.6 million in FY 2002, was spent primarily on five key programs. Each program provides a specific and linked role to ensure safety at nuclear power plants. For example, the licensing program establishes the standards and procedures for operating nuclear power plants in the plant's operating license. The inspection and performance assessment program inspects the plants to ensure that the plants are being operated and maintained in accordance with its license and NRC rules and regulations.

BUDGET AUTHORITY BY PROGRAM

In millions



Total funding for Nuclear Reactor Safety in FY 2002 was $256.6 million

PROGRAM EVALUATION

The Strategic Plan had no program evaluations scheduled for the Nuclear Reactor Safety arena in FY 2002. However, the NRC continued to integrate the improvements to its regulatory process that resulted from the program evaluation conducted in FY 2001 for the ROP.

Although the ROP has been in place for the last two years at all commercial nuclear power plants, NRC staff continues to work with all stakeholders to evaluate its effectiveness. As a key part of this effort, the NRC performs an annual self-assessment to identify lessons learned and areas for improvement. The calendar year 2001 assessment was completed in April 2002.

Overall, the self-assessment concluded that the ROP has succeeded in supporting the NRC's performance goals and making progress towards fulfilling the regulatory principles upon which it was established. During 2001, the ROP was effective in monitoring operating nuclear power plant activities, identifying significant performance issues, and ensuring that licensees took appropriate actions before plant performance became unacceptable, thereby helping to ensure that safety was maintained.

Davis-Besse Evaluation

As discussed earlier, an NRC licensee discovered a cavity in the RPV head at the Davis-Besse Nuclear Power Station. The NRC dispatched an augmented inspection team to gather facts about the event. As a result of that inspection, the NRC issued bulletins to all PWR licensees to address the issues identified by the inspection team. In addition, a task force was formed to review NRC regulatory practices as a result of this significant plant event. That task force issued a report on the event on September 30, 2002. The recommendations are being reviewed and action plans are being developed to address four overarching areas. The first is an assessment of stress corrosion cracking. Secondly, an assessment of operating experience for integration of that experience into training and a review of program effectiveness. The third area is an evaluation of NRC inspection, assessment, and project management guidance. Last, an assessment of barrier integrity requirements is being addressed.

➤ The NRC regulates nuclear medicine.

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

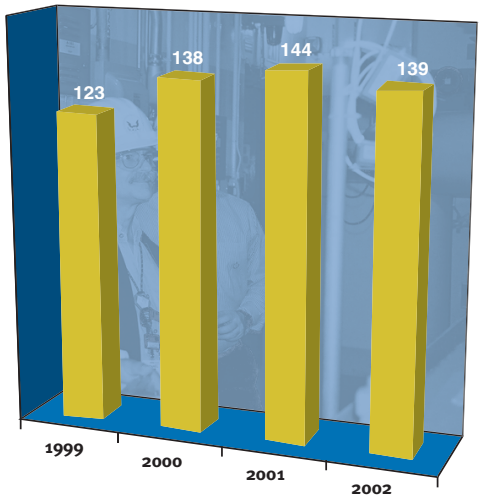
The Nuclear Materials Safety arena encompasses NRC-regulated aspects of nuclear fuel cycle facilities and nuclear materials activities. This arena oversees more than 20,000 specific and 150,000 general licensees. These licensees are regulated by the NRC and 32 Agreement States.

This diverse regulated community includes: uranium extraction; uranium conversion; uranium enrichment; nuclear fuel fabrication; fuel research and pilot facilities; and large and small users of nuclear material for industrial, medical, or academic purposes. The last group--the large and small users of nuclear materials includes radiographers, hospitals, private physicians, nuclear gauge users, large and small universities, and others. This arena includes 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 public health and safety and the environment and protects against radiological sabotage and theft or diversion of special nuclear materials.

Ensuring the Safe Use of Nuclear Materials

The Nuclear Materials Safety arena oversees several distinct program areas. These programs are discussed in the following section.

NUMBER OF CORE SAFETY AND SAFEGUARDS INSPECTIONS COMPLETED



All Inspections completed as scheduled in Fuel Cycle Master Inspection Plan

In FY 2002, the NRC completed 171 fuel cycle licensing actions and conducted 139 inspections of fuel cycle licensees.

Fuel Facilities Licensing and Inspection

The NRC licenses and inspects all commercial nuclear fuel facilities involved in the processing and fabrication of uranium ore into reactor fuel as part of the agency's nuclear fuel cycle safety and safeguards program. The NRC conducts detailed health, safety, safeguards, and environmental licensing reviews and inspections of licensee programs, procedures, operations, and facilities to ensure safe and secure operations. Each of the 44 fuel cycle facilities holds a license that specifies the materials the licensee may possess, sets restrictions on how the materials may be used, and establishes additional licensee responsibilities (such as worker protection, environmental controls, and financial assurance), as appropriate.

The NRC issues and maintains licenses or certificates to fuel facility operators to authorize their possession and use of source, special nuclear, and byproduct material in accordance with requirements promulgated in the Code of Federal Regulations upon NRC approval of license or certificate applications. These applications demonstrate how the facilities will be operated to ensure adequate safety and safeguards.

A significant licensing action began in February 2001, with the submission of the Duke, Cogema, Stone & Webster (DCS) application to construct a mixed oxide (MOX) fuel fabrication facility on the Department of Energy's Savannah River Site near Aiken, South Carolina. The proposed use of MOX fuel is part of a national nonproliferation effort to dispose of surplus weapons-usable plutonium by irradiating it in existing commercial light water reactors. The NRC issued a draft safety evaluation report for construction in April 2002, that documents its preliminary safety conclusions. The staff review process and conclusions in the report were discussed with the public at a meeting held in North Augusta, South Carolina, on August 27, 2002. Due to changes in the national nonproliferation effort, several aspects of the design basis for the MOX facility will be changed, and the applicant submitted a revised construction authorization request on October 31, 2002.

In FY 2002, the NRC published NUREG-1520, Standard Review Plan for the Review of an Application for a Fuel Cycle Facility, which provides guidance to staff to ensure the quality and uniformity of the safety and environmental reviews of applications to construct or modify and operate nuclear fuel cycle facilities.

The NRC continued its oversight of the United States Enrichment Corporation's (USEC) two gaseous diffusion uranium enrichment plants located in Paducah, Kentucky, and Portsmouth, Ohio. In early 2002, the NRC issued several amendments to the Certification of Compliance for the Paducah plant that facilitated relocation of shipping and transfer operations from the Portsmouth, Ohio, facility to the Paducah plant. The first product shipment directly to the customer from the Paducah plant occurred on May 16, 2002.

The NRC implemented the revised Manual Chapter (MC) 2604, Licensee Performance Review, which makes the fuel cycle licensee performance review process more timely and risk-informed, and will allow the agency to focus more quickly on declining performance trends related to safety-significant activities at licensed facilities. Also, the NRC revised and issued for public comment MC 2600, Fuel Cycle Facility Operational Safety and Safeguards Inspection Program The revised program will incorporate the operating experience gained during the transition from a compliance-based to a more risk-informed program and better defines the program management oversight process. Implementation is scheduled to begin in FY 2003.

Materials Users Licensing and Inspection

Currently, the NRC licenses and inspects approximately 4,900 specific licenses for the use of nuclear byproduct and other radioactive material. 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 sealed sources and devices. In FY 2002, the NRC completed 4,009 materials licensing actions.

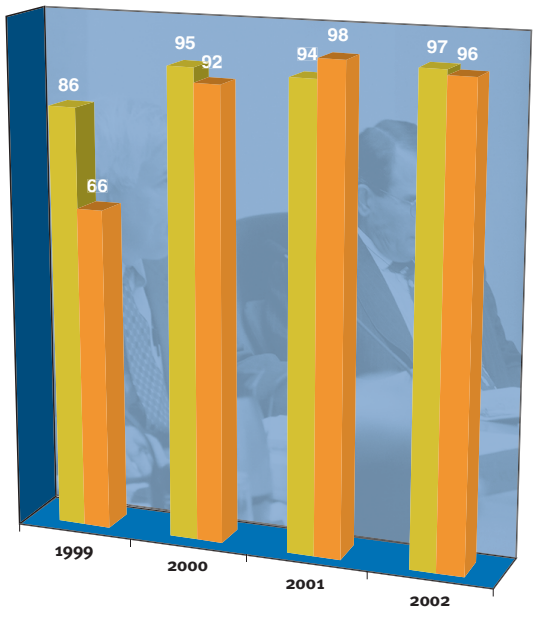
Detailed health and safety reviews and inspections of licensee procedures and facilities provide reasonable assurance of safe operations and the development of safe products. The NRC routinely inspects materials licensees to ensure that licensees are using nuclear material in a safe manner, maintaining accountability of materials, and protecting public health and safety. The NRC identifies issues resulting from incidents and events and analyzes operational experience from NRC and Agreement State licensees. The NRC completed 1,550 nuclear materials program inspections in FY 2002.

Over the past year, significant progress was made towards identifying the regulatory applications that would be amenable to and would benefit from an increased use of risk insights and information. Draft screening criteria were published and eight case studies were completed to (1) evaluate the effectiveness of the screening criteria for identifying regulatory applications amenable to being risk-informed, (2) identify potential near-term process improvements, and (3) evaluate existing tools, methods and data. The case studies were also used to evaluate the feasibility and usefulness of developing safety goals specific to nuclear material and waste regulation. As a result of this effort, proposed draft safety goals were derived from the case studies. Risk insights from NUREG/CR-6642, Risk Analysis and Evaluation of Regulatory Options for Nuclear Byproduct Material Systems, were used in reevaluating inspection priorities.

The NRC continued monitoring materials safety issues through its event evaluation and incident response activities. In FY 2002, the NRC staff met regularly to evaluate the safety significance of the events reported by its licensees, and Agreement States reported events that met performance goal conditions. For events involving the loss or theft of licensed material, response actions and source recovery efforts were commensurate with the safety significance of the material involved. Operating experience associated with losses and thefts of material was utilized in the NRC's ongoing assessment of regulatory changes for the security and control of licensed materials. The timeliness in reviewing nuclear material license renewals and sealed source and device designs has improved from 1999–2002, as identified in the graph below.

TIMELINESS IN REVIEWING NUCLEAR MATERIAL LICENSING APPLICATIONS

Percent completed on time



New material licenses and amendments < 90 days
License renewals and sealed source and design devices < than 180 days

State and Tribal Programs

The NRC provides for cooperation, oversight, technical assistance, and liaison with States, local governments, Indian tribes, and interstate organizations. The NRC shares its regulatory responsibilities with 32 states, called Agreement States. The NRC, with Agreement State participants, conducts periodic Integrated Materials Performance Evaluation Program (IMPEP) reviews of Agreement States programs to ensure public health and safety and compatibility of Agreement State programs with NRC programs. IMPEP uses a common evaluation process that is applicable to both Agreement State and NRC regional materials programs to attain a uniform materials safety policy throughout the nation.

Materials Research

The Research Program is working to develop a technical basis to risk-inform the regulatory requirements for materials licenses by developing risk assessment tools and safety goals for materials applications. In addition, the NRC is cooperating with other Federal agencies to assess the significance of radioactive material released to municipal sewage systems and updating codes used for assessing radiation doses from materials activities.

ANNUAL GOALS AND MEASURES

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.

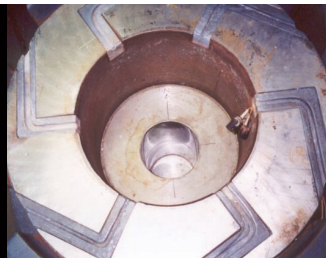
Strategic Goal		Results					
		FY02	FY01	FY00	FY99	FY98	FY97
Prevent radiation-related deaths and illnesses, promote the common defense and security, and protect the environment in the use of source, byproduct, and special nuclear materials.	**Strategic Goal Measures[1]:** ➤ 1. No deaths resulting from 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.[2] ➤ 2. No more than six events per year resulting in significant radiation or hazardous materials exposures from the loss or use of source, byproduct, and special nuclear materials.[3] ➤ 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.[4] ➤ 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 NRC.[5] ➤ 5. No unauthorized disclosure or compromise of classified information causing damage to national security.[6] **Results:** All of the strategic goal measure targets were met.	●	●	●	●	●	●

KEY:

● Indicates goal was achieved.

■ Indicates goal was partially achieved or was not achieved but significant progress was made.

✦ Indicates goal was not achieved.



➤ Cobalt-60 irradiator

RESULTS

The NRC has established five measures to determine its success in meeting Nuclear Material Safety strategic goal. These are top-level measures that 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 these events. The NRC has met all of its strategic goal measures since GPRA reporting began in 1997.

PERFORMANCE GOALS

In addition to our strategic goal, the NRC has four performance goals for the Nuclear Materials Safety arena:

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 1

Losses of Control: For the first performance measure, there were 266 losses of control of licensed material in FY 2002. This was within the target of 300.

Performance Goal 1.		Results					
		FY02	FY01	FY00	FY99	FY98	FY97
Maintain safety, protection of the environment, and the common defense and security	**Performance Measures:**[1] ➤ 1. No more than 300 losses[7] of control of licensed material per year.[8] ➤ 2. No occurrences of accidental criticality.[9] ➤ 3. No more than 30 events per year[10] resulting in radiation overexposures[11] from radioactive material that exceed applicable regulatory limits. ➤ 4. No more than 45 medical events per year.[12] ➤ 5. No more than 5 releases per year[13] to the environment of radioactive material from operating facilities that exceed the regulatory limits.[14] ➤ 6. No more than 5 substantiated cases per year of attempted malevolent use[15] of source, byproduct, or special nuclear material. ➤ 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.[16] ➤ 8. No nonradiological events that occur during NRC-regulated operations, which cause impacts on the environment that cannot be mitigated within applicable regulatory limits, using reasonably available methods.[17] **Results:** The performance goal measure targets were met.	●	●	●	●	●	●

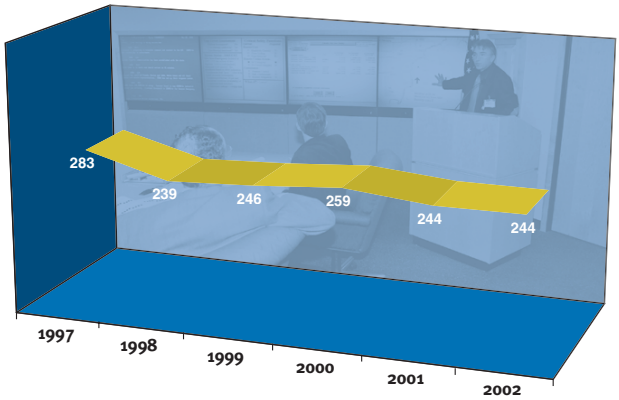
KEY:

● Indicates goal was achieved.

■ Indicates goal was partially achieved or was not achieved but significant progress was made.

✦ Indicates goal was not achieved.

LOSSES OF CONTROL OF LICENSED NUCLEAR MATERIAL



➤ Target: No more than 300 losses of control of licensed nuclear material. The target was lowered in FY 2001 from 356 to 350 and was further lowered in FY 2002 from 350 to 300 to better reflect actual operating experience.

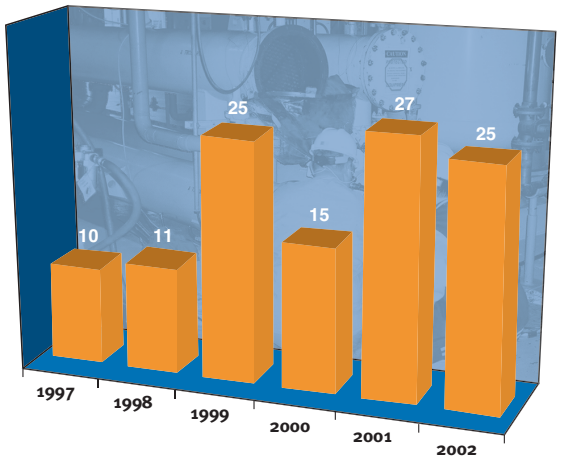
This measure tracks reportable events of materials entering the public domain in an uncontrolled manner. Many of the events counted here do not, by themselves, present a public health and safety risk. For example, most of the losses of control of licensed material involve shielded materials, which are unlikely to result in overexposures to individuals or releases to the environment. However, they are included because their loss may indicate weaknesses in licensee programs, which, if ignored, could trigger a more significant problem.

During FY 2002, NRC took action to increase licensee awareness of the need to maintain effective control over radioactive material, and to report unusual or suspicious activity to local law enforcement and federal agencies. In addition, operating experience associated with the loss or theft of material was utilized in the evaluation of potential regulatory changes. One example is the regulation covering the security and control of portable moisture density gauges typically used in the construction industry. While these gauges do not represent a safety risk, they do represent a a significant portion of the events counted under this measure.

NRC also evaluates all losses and thefts of radioactive material in light of the potential for radiological sabotage. None of the events in FY 2002 involved material of sufficient form and quantity to create an effective radiological weapon. Only four events involved a form and quantity of material that NRC considered to warrant increased attention when reported lost. All four of the sources involved in these events were recovered.

Accidental Criticality: For the second measure, there were no instances of accidental criticality in FY 2002, or in any year since data collection began in FY 1997. Licensees must report inadvertent criticality accidents, regardless of whether they result in exposures or injuries to workers or the public and whether they have adverse impacts on the environment. Events of this magnitude are rare and unexpected.

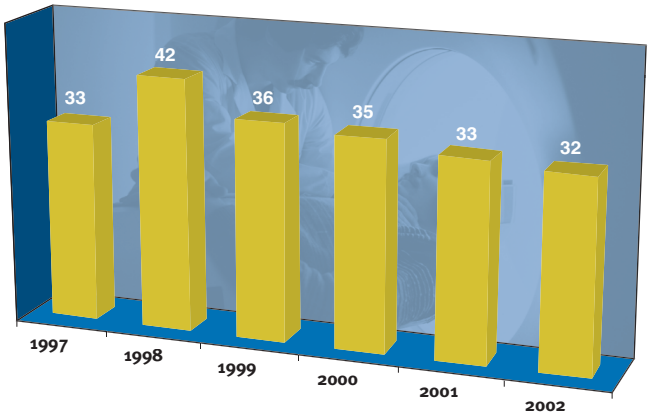
RADIATION OVEREXPOSURES



➤ Target: No more than 30 events resulting in radiation overexposures. The target was lowered from 40 to 30 events in FY 2002 to reflect additional historical data.

Radiation Overexposures: For the third measure, there were 25 events resulting in radiation overexposures from radioactive material that exceeded applicable regulatory limits in FY 2002. This represents a slight decrease over the previous year, FY 2001, when 27 events occurred. For fuel cycle facilities, this measure extends to other hazardous materials used with, or produced from, licensed material, consistent with 10 CFR Part 70, Domestic Licensing of Special Nuclear Material. Reportable chemical exposures are those that exceed license commitments. They would also include chemical exposures involving uranium recovery activities under the Uranium Mill Tailings Radiation Control Act.

MEDICAL EVENTS

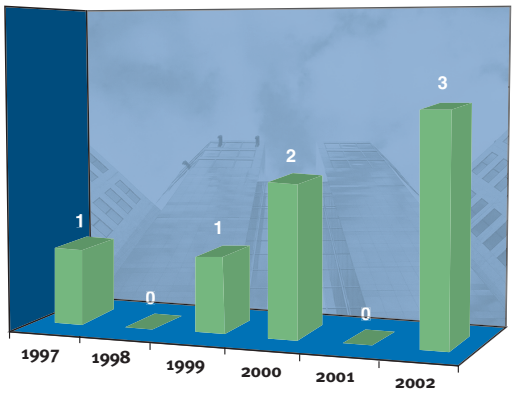


➤ **Target:** No more than 45 medical events.

Medical Events: For the fourth measure, there were 32 medical events in FY 2002. Since GPRA-related data collection began, the peak year was FY 1998 when 42 events occurred. Since that time the trend is generally downward.

This measure pertains to medical events reported under 10 CFR Part 35, Medical Use of Byproduct Material. The NRC's medical use program includes users of byproduct material in medical diagnosis and therapy.

RELEASES TO THE ENVIRONMENT



➤ No more than 5 releases per year to the environment of radioactive material from operating facilities that exceed the regulatory limits.

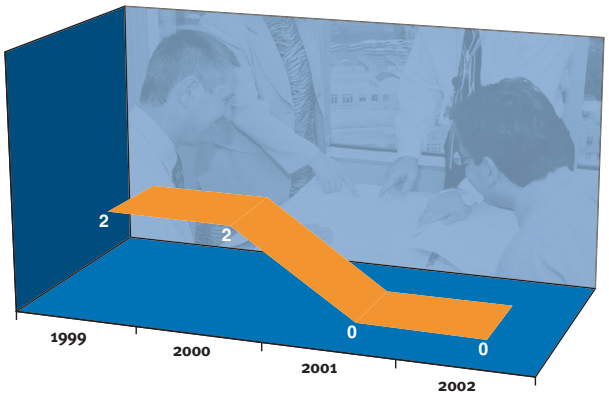
Releases to the Environment: The fifth performance measure is an indicator of the effectiveness of our nuclear materials environmental programs. There were three releases to the environment that exceeded regulatory requirements in FY 2002. These releases did not have any effect on the environment and did not cause doses in excess of the applicable regulatory limit.

Malevolent Uses: The sixth measure tracks our effectiveness at deterring or preventing malevolent uses of nuclear materials. There were no cases of attempted malevolent use of source, by product, or special nuclear material in FY 2002. 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 to the environment. The NRC evaluates intentional violations and deliberate acts against this definition.

Breakdowns of Protection or Control: For the seventh measure, there were no 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 2002. Events collected under this performance measure may indicate a vulnerability thereby compromising public health and safety.

Nonradiological Events: For the eighth measure, there were no instances of nonradiological events during NRC-regulated operations that caused impacts on the environment in FY 2002, or in any year since GPRA-related data collection began in FY 1997. This measure only involves chemical releases from the NRC-related activities under the Uranium Mill Tailings Radiation Control Act. 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 the groundwater.

MALEVOLENT USES



➤ No more than 5 substantiated cases per year of attempted malevolent use of source, byproduct, or special nuclear material

➤ Radioactive materials are used in a wide variety of devices.

Performance Goal 2.		Results					
		FY02	FY01	FY00	FY99	FY98	FY97
Increase public confidence.	**Performance Measures:** ➤ 1. Complete milestones relating to collecting, analyzing, and trending information for measuring public confidence. ➤ 2. Complete all the public outreaches. ➤ 3. Complete the milestones specific to the agency allegation program effectiveness assessment plan. (This measure will be deleted in FY 2003.) ➤ 4. Issue Director's Decisions for petitions filed to modify, suspend, or revoke a license under 10 CFR 2.206 within an average of 120 days. **Results:** The first three performance measure targets were met. The fourth performance measure was not applicable in FY 2002 because no petitions were filed in the Nuclear Materials Safety arena in FY 2002.	●	●	●	●	●	●

KEY:

● Indicates goal was achieved.

■ Indicates goal was partially achieved or was not achieved but significant progress was made.

✦ Indicates goal was not achieved.

Performance Goal 2

Public Confidence: The NRC met the milestone to develop recommendations for continued use of public meeting feedback forms or for another method of assessing public confidence. The NRC completed the pilot program to determine the viability of the public meeting feedback forms to assess the effectiveness of NRC's public meeting process. The NRC has decided to keep the feedback forms as a tool to measure public confidence since it helps to improve interactions with the public. The NRC compiled and analyzed the results of all the feedback forms for the entire period of the pilot program, September 2000 to February 2002. In the more than 922 public meetings held during this period the public comments ranged from very positive to very critical. For example, 70 percent of respondents were familiar (28 percent somewhat familiar) with the meeting topic prior to attending and 55 percent have attended more than five NRC meetings. Eighty-one percent of respondents indicated that attendees' questions were answered clearly, completely, and candidly, and 11 percent indicated they were not.

Public Outreach Activities: Public outreach meetings provide the public with information on NRC activities. FY 2002 examples of public outreach efforts include: the Uranium Recovery Workshop; public meetings on the MOX draft Environmental Impact Statement and draft Safety Evaluation Report; participation at the annual meeting of the Organization of Agreement States; the Risk Task Group Integration meeting; attendance at the Conference of Radiation Control Program Directors annual meeting; workshops and public meetings associated with major rulemakings including Part 35, Medical Use of Byproduct Material. All of the scheduled public outreaches were held in FY 2002.

Allegation Program Assessment: The FY 2002 milestone for performance measure three was for the NRC staff to submit an analysis of the pilot program survey to ascertain how NRC did in responding to and addressing allegers' issues. The Commission has decided to discontinue using the survey as a means of measuring the effectiveness of the allegation program. This decision was based primarily on the fact that the

latest survey did not provide any new insights and other methods of feedback provide adequate information on the effectiveness of the program. As a result, this performance measure is being deleted for FY 2003. However, the NRC will continue in closure letters to ask allegers for comments on the resolution of allegations. The NRC will also monitor feedback received from allegers, and reconsider the need for a survey if that feedback begins to indicate that systemic problems are arising.

Directors Decisions: There were no petitions filed under 10 CFR 2.206 in the Nuclear Materials Safety arena in FY 2002.

Performance Goal 3

Risk-Informed Regulation: The first measure focuses on progress in developing a coordinated approach to implementing risk-informed decisions throughout the agency's regulatory processes. The milestones for developing a risk-informed regulation implementation plan (RIRIP) were completed on schedule. These included sending the RIRIP updates to the Commission (December 2001 and July 2002) and reporting the final integrated results of the case studies evaluating the use of risk insights for the Office of Nuclear Material Safety and Safeguards regulatory activities.

Process Improvements: This measure shows steps taken to improve our internal processes. This year several processes were evaluated for improvements. In one case, staff began implementing a number of regulatory changes in the materials area based upon recommendation from the FY 2001 review of the nuclear byproduct materials program. One of the major actions was development of a pilot materials inspection program which would utilize relative risk and operational data for establishing inspection priorities and frequencies, and streamline inspection preparation, record-keeping, and reporting requirements. These actions are expected to improve the overall efficiency and effectiveness of the program. In addition, the inspection program for medical use was revised to reflect the requirements of 10 CFR Part 35, published on April 24, 2002. Also, the sealed source and device (SS&D) program was reviewed by an outside group, which found the NRC program technically adequate, with no adverse findings. Two "best practices" which improve the staff's ability to locate specific information on SS&Ds were identified. The results will be incorporated into the next revision of NUREG-1556, Volume 3, "Applications for Sealed Source and Device Evaluation and Registration." The pilot materials inspection program and the review of the SS&D program are also described in the Program Evaluation section of this report.

Performance Goal 3.		Results					
		FY02	FY01	FY00	FY99	FY98	FY97
Make NRC activities and decisions more effective, efficient, and realistic.	**Performance Measures:** ➤ 1. Complete those specific materials milestones in the Risk-Informed Regulation Implementation Plan. ➤ 2. Complete at least two key process improvements per year in selected program and support areas that increase efficiency, effectiveness, and realism. **Results:** Both performance measure targets were met in FY 2002.	●	●	●	●	●	●

KEY:

● Indicates goal was achieved.

■ Indicates goal was partially achieved or was not achieved but significant progress was made.

✦ Indicates goal was not achieved.

Performance Goal 4.		Results					
		FY02	FY01	FY00	FY99	FY98	FY97
Reduce unnecessary burden on stakeholders.	**Performance Measures:** ➤ 1. Complete specific milestones to reduce unnecessary regulatory burden. ➤ 2. Reduce paperwork and record keeping by the NRC on its licensees by at least 25 percent over a period of five years. **Results:** Both performance measure targets were met in FY 2002.	●	●	●	●	●	●

KEY:

● Indicates goal was achieved.

■ Indicates goal was partially achieved or was not achieved but significant progress was made.

✦ Indicates goal was not achieved.

Performance Goal 4

Regulatory Burden: For the first measure, the NRC completed work on the Part 10 CFR, Part 35 rule earlier this year and published the rule in April 2002. The rule provides a more risk-informed, performance-based approach to the regulation of medical licensees. The staff also conducted training and workshops for licensees and worked closely with the licensee community to develop the implementation guidance.

Paperwork Reduction: The NRC also met the target for the second measure by reducing paperwork and recordkeeping burden by 16 percent from FY 2000 to FY 2002, significantly better than the goal of 10 percent for that period. The revision to Part 35 played the largest role in the FY 2002 results.

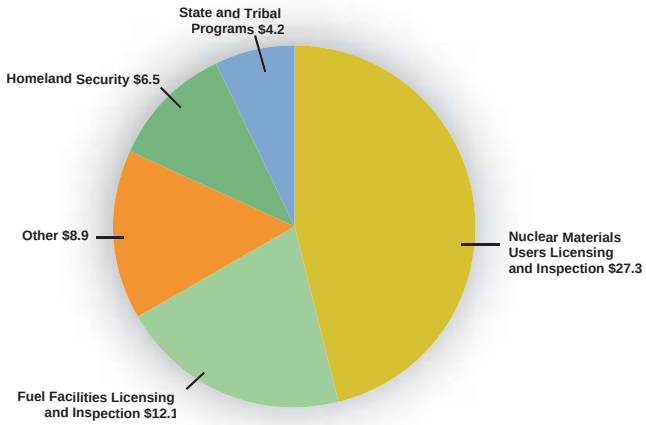
FUNDING

The Nuclear Materials Safety budget totaled $59.0 million in FY 2002. More than 78 percent of the funds in this arena were allocated to three key program areas: fuel facilities licensing and inspection, nuclear materials users licensing and inspection, and homeland security.

There were no program evaluations scheduled in the Strategic Plan to be completed for the Nuclear Material Safety arena during FY 2002. However, the NRC continued to integrate the improvements to its National Material Program, Byproduct Material Program, Integrated Materials Performance Evaluation Program Reviews (IMPEP), and Sealed Source and Device Program into its regulatory programs.

BUDGET AUTHORITY BY PROGRAM

In millions



Total funding for Nuclear Materials Safety in FY 2002 was $59.0 million

PROGRAM EVALUATION

The National Materials Program

The National Materials Program is an effort to create a partnership between the NRC and the Agreement States, for regulating nuclear materials licensees, and ensuring protection of public health and safety and the environment, through the promotion of consensus regulatory priorities, consistent information exchanges, harmonized regulatory approach, and optimized resource strategies. In FY 2002, NRC in coordination with the Organization of Agreement States (OAS) and Conference of Radiation Control Program Directors (CRCPD) Boards developed five pilot projects to provide additional information to help understand the feasibility and viability of the Alliance option recommended by the National Materials Working Group. Each organization (NRC, OAS, CRCPD) has agreed to take the lead for one or more of the pilot projects. Charters for the pilots have been drafted and NRC and the OAS and CRCPD Boards are identifying staff to support working groups to implement the pilots. The pilot projects were discussed at an October 2002, Organization of Agreement States meeting. A report on the results of the pilots is planned for the fall, which will be used as input to help further define a direction for the National Materials Program.

Byproduct Materials Program

The Byproduct Materials Program, Phase II Study was a broad independent review of the nuclear byproduct materials program. It was conducted to: (1) improve efficiency and effectiveness, (2) where possible, apply a more rigorous risk basis to the program, and (3) help control or reduce user fees charged to licensees. In FY 2002, the Phase II findings were implemented. One of the major actions taken led to pilot changes of the materials program inspection frequencies based on a review of their relative risk.

Integrated Materials Performance Evaluation Program

The Integrated Materials Performance Evaluation Program (IMPEP) 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 2002, NRC completed a review of the Region II Materials Program. The review was conducted by a multi-disciplinary team, and included the participation of NRC and Agreement State personnel. The team found the Region II operations to be fully satisfactory with respect to the technical quality of licensing, inspections, status of the inspection program, response to incidents and allegations, and technical staffing and training. The Management Review Board supported the teams proposed findings and determined that the program was operating in a manner that was adequate to protect public health and safety. A mid-cycle IMPEP review of Region III also confirmed its program continued to meet IMPEP performance standards.

Sealed Source and Device Program

The Sealed Source and Device Program (SS&D) is one of the elements of the materials licensing program, which was evaluated under IMPEP in FY 2002. In FY 2002, the review team found program operations to be fully satisfactory as compared with performance benchmarks. An MRB meeting confirmed the team's findings, and identified two best practices currently underway in the NRC's program, which improve the capability for locating specific information on SS&Ds. These best practices involve the use of a newly-developed SS&D database to facilitate searches for information based on certain SS&D characteristics, and the addition of a spreadsheet for improving file organization.

➤ Aerial presentation of the proposed nuclear waste repository at Yucca Mountain, Nevada

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

Overview

The Nuclear Waste Safety arena 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 wastes. The NRC's efforts in this arena also include waste safety research. The NRC's activities under the Nuclear Waste Policy Act (NWPA) focus on the potential high-level waste geologic repository site at Yucca Mountain in Nevada. The NRC conducts its low-level radioactive waste activities in accordance with the Low-Level Radioactive Waste Policy Act.

Ensuring the Safe Transportation and Disposal of Nuclear Waste

The nuclear waste safety arena has oversight of the distinct program areas discussed in the following section.

Spent Fuel Storage and Transportation Licensing and Inspection

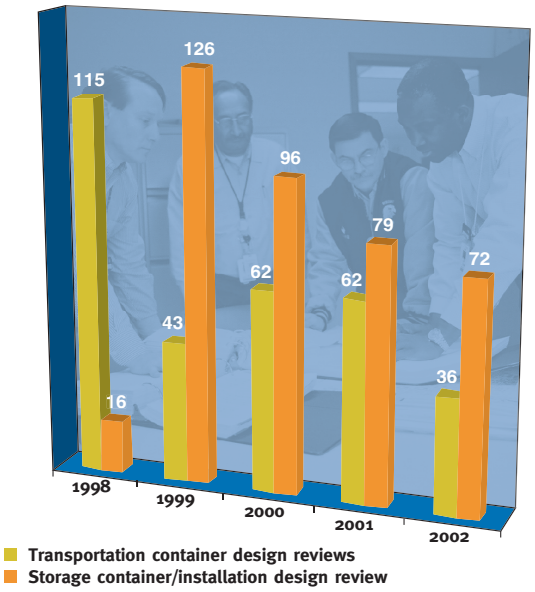
Approximately 3 million shipments of radioactive materials are made each year in the United States. Several Federal agencies share the responsibility for regulating the safety and security of these shipments.

The NRC's transportation activities are closely coordinated with those of the Department of Transportation (DOT) and, as appropriate, with the Department of Energy (DOE) and the Federal Emergency Management Agency. To carry out its regulatory responsibilities for spent fuel and non-spent fuel storage and transportation, the NRC certifies both transport container package designs and spent fuel storage cask designs. The NRC also licenses and inspects interim storage of spent fuel at both reactor and away-from-reactor sites. This helps ensure that licensees transport nuclear materials in packages that will provide a high degree of safety and that licensees provide safe interim storage of spent reactor fuel.

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

In FY 2002, the NRC proposed a rulemaking to change 10 CFR Part 71, which establishes requirements for the shipping of nuclear materials. The proposed changes would make the U.S. transportation and safety requirements compatible with the most recent standards issued by the International Atomic Energy Agency and would add other changes initiated by the NRC. The NRC coordinated the proposed rule changes with the DOT, which is proposing to make the same changes to its transportation regulations.

STORAGE AND TRANSPORTATION DESIGN REVIEWS COMPLETED



For FY 2002, the Spent Fuel Storage and Transportation Licensing and Inspection program completed 72 transport container design reviews and 36 storage container and installation design reviews. The graph above displays the number of reviews between FY 1998–2002. The number of design reviews completed in FY 2002 for both the transport and storage containers were lower than the previous year. The decline is attributed to the redirection of staff efforts to respond to activities associated with the September 11, 2001, terrorist attacks and follow-on vulnerability assessments.

NRC staff completed significant work on the licensing process for the Private Fuel Storage, LLC (PFS) application for a license 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. Staff members prepared two supplements to the PFS Safety Evaluation Report in response to two late-filed amendments to the PFS License Application. Prompt response by the NRC staff allowed the Atomic Safety and Licensing Board Panel (ASLBP) safety hearing schedule to proceed without additional delays. With the cooperation of the Bureau of Land Management, the Bureau of Indian Affairs, and the U.S. Surface Transportation Board, the NRC staff also completed the Final Environmental Impact Statement was also completed for the PFS project, which allowed the environmental hearing schedule to go forward.

Additionally, the NRC staff participated in the second set of ASLBP hearings on the PFS project, which were completed in early July 2002. These hearings represented a significant adjudicatory proceeding for a major new facility and can be considered a precursor of the hearings on the geologic repository licensing process. The ASLBP expects to complete its findings in the first quarter of 2003. A licensing decision will follow, although the schedule depends on whether the ASLBP decision is appealed to the Commission.

High-Level Waste Regulation

The NRC's conducts its high-level waste (HLW) 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 HLW storage, transportation, and disposal. It also prescribes the respective roles of the NRC, DOE, and EPA in the HLW program. The DOE has the responsibility for the actual disposal of the Nation's HLW, commencing with site characteri-

zation and repository design, and continuing through development, operation, and ultimate closure of a deep geologic repository. The U.S. Environmental Protection Agency (EPA) has been charged with developing environmental standards specific to Yucca Mountain. These standards, which must be consistent with the recommendations of the National Academy of Sciences, will be used to evaluate the safety of the potential geologic repository developed by the DOE. The NRC has extensive prelicensing responsibilities and will be the regulatory authority to issue a license, if appropriate, after determining whether the potential DOE license application for a geologic repository at Yucca Mountain complies with the applicable regulatory standards.

In FY 2002, the NRC continued to build and refine the regulatory framework for evaluating the license application for the proposed Yucca Mountain repository. The NRC issued its final regulation for Yucca Mountain in 10 CFR Part 63 in November 2001. Those regulations reflected the environmental standards developed by EPA. The NRC also published for public comment a proposed rule that addresses "unlikely events" for the proposed Yucca Mountain repository that can be excluded from certain required assessments because of their low probability of occurrence. The NRC also issued for comment a draft of the Yucca Mountain Review Plan, Revision 2, an important companion to the rules in 10 CFR Part 63. The review plan describes the information the staff is to review in the license application and the criteria for determining whether issues have been satisfactorily addressed.

In April 2002, the President accepted the Secretary of Energy's recommendation that the Yucca Mountain site be developed as a potential repository for the disposal of high-level nuclear wastes and spent nuclear fuel. In July, Congress approved a resolution of siting approval, which authorizes the DOE to apply to the NRC for a license to operate Yucca Mountain as a nuclear waste repository. The NRC expects the DOE to file a license application in late 2004.

The NRC continued important public exchanges with the DOE on the technical issues most important to licensing the potential HLW repository. These exchanges resolve subissues or lead to agreements for DOE to submit additional information to address the NRC's concerns. Further, the NRC held numerous meetings with stakeholders on health and safety issues associated with the potential HLW repository at Yucca Mountain, Nevada.

Decommissioning

Decommissioning involves removing radioactive contamination in buildings, equipment, groundwater, and soil to such levels that a facility can be released from service for either unrestricted or restricted use. This program includes power and non-power reactors and materials and fuel facilities. The NRC conducts decommissioning licensing and inspection activities for commercial nuclear facilities currently in the decommissioning process. Licensing actions require NRC review and approval before licensees can implement them. By conducting inspections, 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.

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 maintains a Site Decommissioning Management Plan (SDMP) list. The SDMP lists sites with technical, financial, and/or other challenges that must be addressed before decommissioning can be completed. During FY 2002, the NRC approved the removal of one site from the SDMP, the Lake City Ammunition Plant in Independence Missouri. The site was deferred to EPA for cleanup as part of a larger cleanup under the Comprehensive Environmental Response, Compensation, and Liability Act. The NRC also developed and implemented public communication plans for SDMP sites to enhance outreach activities with stakeholders.

The NRC issued the final policy statement specifying the decommissioning criteria for the West Valley Demonstration Project at West Valley, New York. These criteria define standards by DOE can ensure that the site can be remediated in a manner that protects public health and safety and the environment.

Waste Safety Research

The Waste Safety Research Program supports a number of the NRC's nuclear waste activities. Research studies involve the decommissioning of facilities, the disposal and storage of radioactive waste, the cleanup of contaminated sites, the development of tools to assess the movement of radionuclides in the environment, and the assessment of dose to the public as a result of uranium recovery. All research studies support important agency functions. Additionally, the evaluation of spent nuclear fuel storage casks, interim spent fuel storage facilities, and transportation systems support the NRC's efforts to use risk information in all appropriate aspects of regulatory decision making. In FY 2002, the NRC completed a pilot probabilistic risk study of a dry cask storage system.

Package Performance Study

NRC is studying the performance of spent nuclear fuel transportation packages under accident conditions including high-speed impact and fire. Researchers have performed preliminary analyses and prepared test protocols for testing a rail transportation cask. They will perform additional analyses for a truck cask and then revise the test protocols to incorporate the truck cask analyses. The NRC will publish the protocols and conduct public meetings during FY 2003 to discuss the basis conditions of testing. The tests, to be conducted in FY 2004 and FY 2005, will provide empirical data to enhance confidence in the NRC's ability to computationally predict the performance of various transportation packages under accident conditions.

➤ Independent spent fuel storage installation at H.B. Robinson Nuclear Power Plant, Florence, South Carolina

Strategic Goal		Results					
		FY02	FY01	FY00	FY99	FY98	FY97
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.	**Performance Measures:**[1] ➤ 1. No deaths resulting from acute radiation exposure from radioactive waste[2] ➤ 2. No events resulting in significant radiation exposure[3] from radioactive waste ➤ 3. No release of radioactive waste causing an adverse impact on the environment[4] ➤ 4. No losses, thefts, diversion, or radiological sabotage[5] of special nuclear material or radioactive waste **Results:** All of the strategic goal measure targets were met.	●	●	●	●	●	●

KEY:

● Indicates goal was achieved.

■ Indicates goal was partially achieved or was not achieved but significant progress was made.

✦ Indicates goal was not achieved.

ANNUAL GOALS AND MEASURES

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.

RESULTS

The Nuclear Waste Safety arena has established four measures to determine its success in meeting its strategic goal. These are top-level measures defining 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. The NRC has met all of its strategic goal measures since GPRA reporting began in 1997.

PERFORMANCE GOALS

In addition to our strategic goal, the NRC has four performance goals for the Nuclear Materials Safety arena:

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 1

Radiation Overexposures: For the first measure, no radiation overexposures from radioactive waste exceeded regulatory limits in FY 2002 or in any year since GPRA-related data collection began in FY 1997. Radiation overexposures are those events that exceed limits provided by NRC regulation 10 CFR 20.2203(a)(2). This measure focuses on events that could result in public or worker overexposures.

Breakdowns of Physical Protection: For the second measure, no breakdowns of physical protection occurred that resulted in a vulnerability to radiological sabotage, theft, diversion, or loss of special nuclear materials or radioactive waste in FY 2002, or in any year since GPRA-related data collection began in FY 1997. Events collected under this performance measure are those that may indicate a vulnerability to radiological sabotage, theft, diversion, or loss of special nuclear materials or radioactive waste, thereby compromising public health and safety.

Radiological Releases: For the third measure, no radiological releases to the environment from operational activities exceeded the regulatory limits in FY 2002 or in any year since GPRA-related data collection began in FY 1997.

Handling of Radioactive Waste and Materials: There were no instances where the NRC did not provide an adequate regulatory framework for radioactive waste and materials under the NRC's regulatory jurisdiction to be handled, transported, stored, or disposed of safely in FY 2002 or in any year since GPRA-related data collection began in FY 1997. The NRC monitors the needs for transportation of materials and waste within its regulatory authority. The NRC also monitors the need for storage and disposal of nuclear wastes under its regulatory authority. For the majority of radioactive waste or materials, the NRC expects no instances where they cannot be handled, transported, or disposed of safely now or in the future.

Performance Goal 1.		Results					
		FY02	FY01	FY00	FY99	FY98	FY97
Maintain safety, protection of the environment, and the common defense and security.	**Performance Measures[1]:** ➤ 1. No events resulting in radiation overexposures[6] from radioactive waste that exceed applicable regulatory limits[7] ➤ 2. No breakdowns of physical protection resulting in a vulnerability to radiological sabotage, theft, diversion, or loss of special nuclear materials or radioactive waste[8,9] ➤ 3. No radiological releases[10] to the environment from operational activities that exceed the regulatory limits[11] ➤ 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[12,13] **Results:** All of the performance goal measure targets were met.	●	●	●	●	●	●

KEY:

● Indicates goal was achieved.

■ Indicates goal was partially achieved or was not achieved but significant progress was made.

✦ Indicates goal was not achieved.

Performance Goal 2.		Results					
		FY02	FY01	FY00	FY99	FY98	FY97
Increase public confidence.	**Performance Measures:** ➤ 1. Complete milestones relating to collecting, analyzing, and trending information for measuring public confidence ➤ 2. Complete all the public outreaches[14] ➤ 3. Complete the milestones specific to the agency allegation program effectiveness assessment plan. (This measure will be deleted in FY 2003.) ➤ 4. Issue Director's Decisions for petitions filed to modify, suspend, or revoke a license under 10 CFR 2.206[15] within an average of 120 days[16] **Results:** Performance goal measure targets for the first three performance measures were met. The target for the fourth performance measure was not met since for the two applicable petitions, the Director's Decisions were issued in an average of 167 days.	●	●	●	●	●	●

KEY:

● Indicates goal was achieved.

■ Indicates goal was partially achieved or was not achieved but significant progress was made.

✦ Indicates goal was not achieved.

Performance Goal 2

Measuring Public Confidence: The NRC developed recommendations for continued use of the public meeting feedback form or for another method of assessing public confidence. The NRC completed the pilot program conducted to determine the viability of the feedback forms in assessing the effectiveness of NRC's public meeting process. The NRC has decided to keep the feedback form, as a tool to measure public confidence since the forms help to improve the agency's interactions with the public. The NRC compiled and analyzed the results of all the feedback forms for the entire period of the pilot program, September 2000 to February 2002. Over 900 public meetings occurred during this period, and the public comments ranged from very positive to very critical. For example, 70 percent of respondents were very familiar (28 percent somewhat familiar) with the meeting topic prior to attending and 55 percent have attended more than five NRC meetings. Eighty-one percent of respondents indicated that attendees' questions were answered clearly, completely, and candidly, and 11percent indicated they were not.

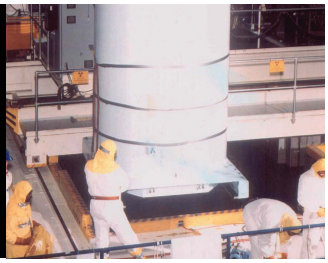
Public Outreach: Public outreach is designed to provide the public with information on NRC activities. The NRC held all of the planned public outreach meetings in the nuclear waste arena. Examples of public outreach efforts in FY 2002 include public meetings held in Nevada to address the Yucca Mountain Review Plan, regulations on disposal of high-level radioactive waste in a geologic repository at Yucca Mountain (10 CFR Part 63), and Site Sufficiency comments, along with broader topics such as the repository licensing process; an open house held in Las Vegas, Nevada where NRC staff were available to discuss NRC's role in regulating the safety of the proposed repository; and public meetings held on the proposed revision to the NRC's transportation regulation (10 CFR Part 71 rulemaking).

Allegation Program: FY 2002 milestone for the third performance measure was for the NRC staff to submit an analysis of the pilot program survey to evaluate the NRC's performance responding to and addressing alleger's issues. The Commission has decided to discontinue using the survey as a means of measuring the effectiveness of the allegation program. This decision was based primarily on the fact that the latest survey did not provide any new insights and other methods of feedback provide adequate information on the effectiveness of the program. As a result, this performance measure is being deleted for FY 2003. However, NRC will continue in closure letters to ask allegers for comments on the resolution of allegations. The NRC will also monitor feedback received from allegers, and reconsider the need for a survey if that feedback begins to indicate that systemic problems are arising.

Director's Decision-10 CFR 2.206: The fourth measure assesses the timeliness of the Director's Decisions for petitions filed to modify, suspend, or revoke a license under 10 CFR 2.206. The NRC received a number of security-related petitions in FY 2002. Because of the concentrated security-related efforts undertaken during this time, the security-related concerns raised by these petitions needed to be addressed in an integrated fashion with the benefit of the interim compensatory measures (ICMs) and the orders that followed the ICMs. Therefore, in order to evaluate the issues fully, the NRC took longer than the 120-day goal to complete its review and issue a decision. The NRC issued decisions on two relevant applicable petitions in an average of 167 days. Security advisories have since been issued and addressed by licensees with no impact on public confidence from the delay.

Performance Goal 3

Risk-Informed Regulation: The first measure focuses on progress in developing a coordinated approach to implementing risk-informed decisions throughout the agency's regulatory processes. The NRC accomplished the milestones towards developing a risk-informed regulation implementation plan (RIRIP) on schedule. These included sending the RIRIP to the Commission, briefing the Commissioners on the contents (December



➤ Dry cask storage.

Performance Goal 3.		Results					
		FY02	FY01	FY00	FY99	FY98	FY97
Make NRC activities and decisions more effective, efficient, and realistic.	**Performance Measures:** ➤ 1. Complete those specific waste milestones in the Risk-Informed Regulation Implementation Plan. ➤ 2. Complete at least two key process improvements per year in selected program and support areas that increase efficiency, effectiveness, and realism. ➤ 3. Complete all major prelicensing milestones needed to prepare for a licensing review of the potential Yucca Mountain repository, consistent with DOE's schedules and before DOE submits its license application.[17] **Results:** All of the performance goal measure targets were met.	●	●	●	●	●	●

KEY:

● Indicates goal was achieved.

■ Indicates goal was partially achieved or was not achieved but significant progress was made.

✦ Indicates goal was not achieved.

2001 and July 2002), and preparing an overall risk assessment for a dry cask storage system.

Process Improvements: For the second measure, the NRC completed two process improvement reviews in FY 2002. The staff completed a risk insights initiative, which is designed to assess the importance of key technical issues associated with the performance of the proposed Yucca Mountain repository. These insights will help prioritize staff review during the licensing phase. In FY 2002, the process supporting regional inspection planning for independent spent fuel storage installations at 10 CFR Part 50 sites was improved through the use of a risk-informed, performance-based approach, which resulted in a more efficient allocation of available resources. Also, during FY 2002, staff in the nuclear waste safety arena continued progress towards completion of a multi-year effort to update, consolidate, and make more risk-informed and performance-based, the current decommissioning guidance in NUREG-1757. The NRC issued Volume 1 for public comment and began drafting Volumes 2 and 3.

Prepare for Licensing Review of Potential Yucca Mountain Repository: For the third measure, the NRC met all but one milestone. NRC published the final 10 CFR Part 63, Disposal of High-Level Radioactive Waste in a Proposed Geologic Repository at Yucca Mountain Nevada, on November 2, 2001. This final rulemaking conforms the NRC's rule to EPA's Yucca Mountain standard. The NRC also issued in FY 2002 for public comment a proposed amendment to Part 63, which addresses "unlikely events" that may affect repository performance. The NRC also issued draft Revision 2 of the Yucca Mountain Review Plan for public comment, and held a number of public meetings in Nevada to discuss the document. The Review Plan describes how the staff will review DOE's license application against the requirements in 10 CFR Part 63. The public comment period ends in late FY 2002, and the Review

Performance Goal 4.		Results					
		FY02	FY01	FY00	FY99	FY98	FY97
Reduce unnecessary burden on stakeholders.	**Performance Measures:** ➤ 1. Complete those specific waste milestones to reduce unnecessary burden. **Results:** The NRC's FY 2000 Strategic Plan identified no milestones to be completed in the Nuclear Waste Safety arena.	●	●	●	●	●	●

KEY:

● Indicates goal was achieved.

■ Indicates goal was partially achieved or was not achieved but significant progress was made.

✦ Indicates goal was not achieved.

Plan will be completed in FY 2003. In addition, the NRC completed the Site Characterization Sufficiency Comments in FY 2002. The NRC continued important technical exchanges with the DOE on the key technical issues most important to licensing the potential HLW repository to resolve subissues or reach agreement for the DOE to submit additional information to address NRC's concerns. Because of delays in DOE's program, the NRC reviewed and was able to close 46 of the 60 agreements, which were scheduled for closure in FY 2002.

For further identification of agreements, see Program Evaluation—Risk Insights Initiative for Proposed Yucca Mountain Project.

Performance Goal 4

There were no milestones identified in the FY 2000 Strategic Plan to be completed for the Waste arena. However, the NRC has a number of milestones to be completed in FY 2003–2004, including review of any application submitted for Standard Technical Specifications for Spent Fuel Dry Storage Cask Designs, and adoption of the STS, if approved.

Funding

Each program area in the Nuclear Waste Safety arena plays a specific role in ensuring the safety, protection, and security of the public and environment from radioactive waste. Most of the funding was budgeted for high-level waste regulation and spent fuel storage and transportation (see graph on the right). The regulation of decommissioning accounted for another 17 percent. Waste safety research, which accounted for approximately 16 percent of the allocated funds, supports the NRC's activities associated with decommissioning of nuclear reactors and other facilities, and the interim storage and transportation of spent nuclear fuel. Lastly, homeland security accounted for 6 percent of the allocated funds.

PROGRAM EVALUATION

There were no program evaluations scheduled in the Strategic Plan to be completed for the Nuclear Waste Safety arena during FY 2002. However, NRC initiated one and completed one program evaluation in FY 2002, which are identified below.

Risk Insights Initiative for Proposed Yucca Mountain Project

In FY 2002, NRC initiated a Risk Insights Initiative that will assist in identifying the most important information related to the performance of the proposed Yucca Mountain repository, and resolution of licensing issues. NRC staff has identified nine key technical issues that are most significant to repository performance, such as thermal effects on flow of water. The NRC and DOE have developed formal agreements on the information that DOE needs to furnish in order to address each of these issues, and their related subissues. The Risk Insights Initiative was presented by NRC staff to the Advisory Committee on Nuclear Waste, and will continue in FY 2003. It will help focus regulatory activities, and support risk-informed decision-making during the prelicensing and licensing phases of the repository program.

Decommissioning Program: Lessons Learned from NRC and Licensee Experience

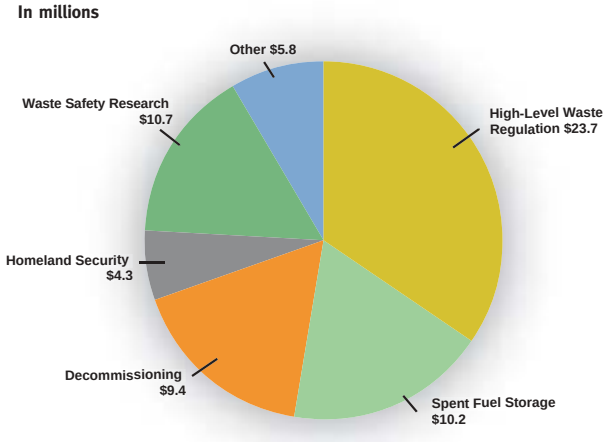
In FY 2002, the NRC completed a review of decommissioning plans and license termination plans recently submitted by licensees to identify improvements that should result in more effective and efficient use of NRC's and licensees' resources. In 1997, the NRC issued its final regulation for termination of licenses. This regulation requires different information to be submitted than had been previously required. As a result of the review, the NRC found common areas in licensee plans that, if more completely addressed, would eliminate requests for additional information and improve the quality and timeliness of NRC reviews.

Twelve specific areas of improvement were identified and summarized in a Regulatory Issue Summary issued in January 2002. They included the need for more frequent interactions between NRC and licensees during the preparation of decommissioning plans, greater use of in-process inspections than one time confirmatory surveys, and more complete identification of assumptions for modeling of radiation exposures to humans.

To further improve the review of these plans, the NRC has also expanded its acceptance review process to facilitate the identification of significant technical deficiencies earlier in the review process. In addition, the NRC will focus on reviewing financial assurance and institutional controls issues associated with sites requesting license termination with restrictions on future site use, before conducting a full plan review, as resolving these issues is key to approving the plan.

BUDGET AUTHORITY BY PROGRAM

In millions



Total funding for Nuclear Waste Safety in FY 2002 was $64.1 million.

INTERNATIONAL NUCLEAR SAFETY SUPPORT

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

Overview

The International Nuclear Safety Support arena encompasses international nuclear safety and regulatory policy formulation, import-export licensing for nuclear materials and equipment, treaty implementation, international information exchange, international safety and safeguards cooperation and assistance, and deterrence of nuclear proliferation. The agency's international activities support broad U.S. national interests, as well as the NRC's domestic mission.

Maintaining A Program of International Cooperation

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

The International Nuclear Safety Support arena also encompasses the issuance of import/export licenses. It includes activities to ensure compliance with statutes, treaties, conventions, and agency agreements for cooperation and support for International Development-related work with the countries of the Former Soviet Union (FSU) and Central and Eastern Europe (CEE).

Strategic Goal		Results					
		FY02	FY01	FY00	FY99	FY98	FY97
Support U.S. interests in the safe and secure use of nuclear materials and in nuclear non-proliferation.	**Performance Measures:** ➤ 1. Fulfills 100 percent of the significant[2] obligations over which the NRC has regulatory authority arising from statutes, treaties, conventions, and Agreements for Cooperation.[3] ➤ 2. No significant proliferation incidents attributable to some failure of the NRC. ➤ 3. No significant safety or safeguards events that result from the NRC's failure to implement its international commitments. **Results:** All of the strategic goal measure targets were met.	●	●	●	●	●	●

KEY:

● Indicates goal was achieved.

■ Indicates goal was partially achieved or was not achieved but significant progress was made.

✦ Indicates goal was not achieved.

➤ Oconee Nuclear Power Plant at Greenville, South Carolina

INTERNATIONAL NUCLEAR SAFETY SUPPORT

As the regulator of the world's largest civilian nuclear program, the NRC has extensive regulatory experience to contribute to international programs in areas such as nuclear reactor safety, nuclear safety research, radiation protection, nuclear materials safety and safeguards[1], nuclear facility and materials security, waste management, and decommissioning of nuclear facilities. The NRC can learn, in turn, from the regulatory experience of other countries. The NRC gains access to non-U.S. safety security and safeguards information through interaction with foreign entities, thereby leveraging its resources. Additionally, the NRC supports the development and implementation of international regulatory standards, policies, and practices.

RESULTS

The International Nuclear Safety Support arena has established three measures to determine its success in meeting the NRC's strategic goal.

Significant Obligations: For the first performance measure, the NRC carried out 100 percent of the significant obligations over which it has regulatory authority arising from statutes, treaties, conventions, and Agreements for Cooperation during FY 2002. 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 NRC led the U. S. delegation to the Second Review Meeting of the Contracting Parties under the Convention on Nuclear Safety (CNS) in Vienna, Austria in April 2002. The Chairman presided over the discussion of the U.S. program and the U.S. National Report, while members of the U.S. delegation participated in the peer review of the national reports of 27 contracting parties. The report of the U.S. delegation was sent to the State Department with a letter recommending that it be sent to the Senate Foreign Relations Committee. The NRC also participates in development of other international legal framework documents (e.g., The Convention of the Physical Protection of Nuclear Materials, The Nuclear Liability Convention, and the IAEA Safeguards Additional Protocol).

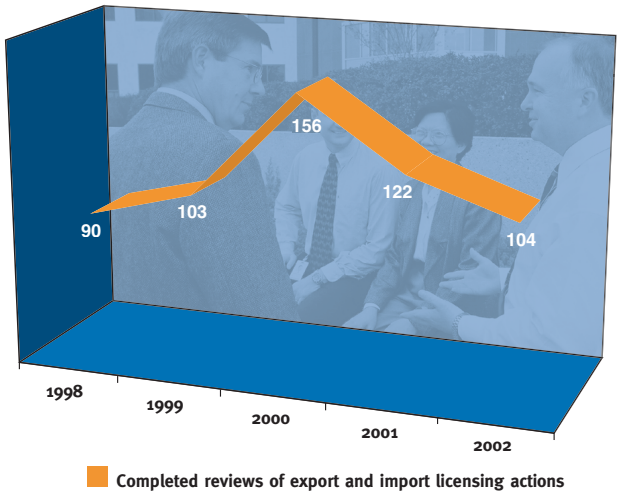
Proliferation: No significant proliferation incidents attributable to some failure of the NRC were reported by the U.S. Government, the IAEA, or other authoritative international organization during FY 2002.

Safety or Safeguard Events: For the third performance measure, no significant safety or safeguards events resulting from the NRC's failure to implement its international commitments occurred in FY 2002. In addition, the U.S. national report for the CNS was published as NUREG-1650.

The NRC approved two export license amendment requests, each of which increased by approximately five kilograms the amount of highly-enriched uranium (HEU) authorized for export to Canada for use as target material for medical isotope production. In addition, the NRC participated in an interagency working group to review physical security measures applicable to the transportation of HEU.

The NRC also played a key role in defining criteria for international agreements on exclusion, clearance, and exemption of contaminated and radioactive materials and for release of commodities for unrestricted use.

NRC EXPORT/IMPORT LICENSING ACTIONS



The NRC completed action on the 104 export and import licenses it received within the 60-days processing deadline. This includes reviews of proposed exports of proliferation-sensitive equipment and material (see graph above).

The NRC participated in IAEA operational safety review team missions to the Czech Republic (two missions) and Hungary; International Regulatory Review Team missions to Armenia, Mexico, Lithuania, and the Czech Republic; and a radiation protection mission to Tajikistan. The NRC engaged in bilateral assistance activities in nuclear safety and safeguards with Russia, the Ukraine, Armenia, Kazakhstan, and countries of central and Eastern Europe in close coordination with the Departments of State and Energy. The NRC successfully concluded eight bilateral exchange agreements in FY 2002 between the Commission and appropriate foreign counterparts to ensure that an effective framework exists for NRC's international exchanges.

Funding for Achieving the Strategic and Performance Goals

The International Nuclear Safety Support arena budget totaled $11.7 million in FY 2002.

Program Evaluation

The Strategic Plan identified no program evaluations for the International Nuclear Safety Support arena in FY 2002.

ADDRESSING THE PRESIDENT'S MANAGEMENT AGENDA

The President's Management Agenda contained Governmentwide initiatives in FY 2002 to reform government to be more citizen-centered, results-oriented, and market-based, actively promoting competition rather than stifling innovation. As a result, the President identified five Governmentwide initiatives to improve government performance: (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 its FY 2002 accomplishments in these five areas are identified below. In addition, the General Accounting Office and NRC's Inspector General (IG) identified a number of management challenges, which these actions also address (see Appendix A for a discussion of the management challenges).

Strategic Management of Human Capital

The Nuclear Regulatory Commission recognizes the importance of managing its human capital and has taken steps to address emerging security issues and an aging workforce.

Strategic Alignment

In FY 2001, the NRC IG suggested the need for an agency-wide workforce plan. In FY 2002, the NRC provided a report to OMB, Strategic Human Capital and Workforce Restructuring Plan: Improving Performance at the Nuclear Regulatory Commission, which describes the NRC high-level human capital plan. The plan also addresses workforce and organizational structure challenges, and activities being taken to implement the President's Management Agenda initiatives.

The plan describes NRC's commitment to strengthening its workforce planning efforts and the achievement of NRC's strategic human capital management goals. It reflects the continuing efforts to address challenges presented by the external environment and presents strategies that are being implemented to accomplish the NRC's mission.

During FY 2002, the staff presented integrated human capital resource data and information to the Commission for the FY 2004 budget submission. The agency first implemented this approach in FY 2001 as part of its FY 2003 planning, budgeting, and performance management (PBPM) process. This approach provided NRC managers with a forum to discuss human capital needs and recommend strategies to meet them. This also resulted in an agency-wide integrated and coordinated approach to human capital planning and budgeting for the future.

To further strengthen the alignment of planning, budgeting, and performance, the agency is exploring options to restructure Senior Executive Service (SES) performance plans to conform to the President's Management Agenda initiative on budget and performance integration.

Workforce Planning and Deployment

In June 2002, an online skills and competencies strategic workforce planning system was implemented. The system enables managers to specify their skills needs and check available employees' expertise in these skill areas. Managers can view employee skills assessments along with demographic information that includes educational attainment and retirement eligibility. Managers can use this information to devise strategies to ensure that the workforce continues to possess the skills needed to accomplish the NRC's mission.

The NRC's mission-critical skills are in engineering, science (including health physics), mathematics, threat analysis, and information technology. During FY 2002, the NRC collected agency-wide skills data to be used for identifying gaps in needed skills and addressing critical skills shortages through a wide variety of human resource flexibilities.

During FY 2002, the agency continued to support its fellowship and scholarship programs, which are important components of the agency's strategic workforce planning process. NRC attended 22 targeted recruitment events at colleges and universities and participated in 12 minority professional career fairs. This effort identified a significant number of highly qualified and diverse entry-level and intern candidates for technical and administrative positions.

The NRC developed restructuring initiatives for consideration by the Commission, to more clearly align NRC's organizational structure with its human capital goals in FY 2002. Action plans, linked to the agency's strategic workforce planning efforts, were being developed to review systematically our organizational structure. The plans respond to ongoing external and internal changes, and streamline programs and processes to ensure organizational effectiveness.

Talent

During FY 2002, the NRC continued to develop and implement a systematic approach for addressing the agency's human capital needs through a comprehensive strategic workforce planning process. The goal of the process is to ensure the availability of the appropriate staff skills and competencies to fulfill our safety mission; to enhance safeguards and security in response to the September 11, 2001, terrorist attacks on the United States; and to identify and develop approaches to address potential areas of new regulatory responsibilities.

In FY 2002, the NRC implemented an automated web-based vacancy announcement system that includes online application capability and rating, ranking and referral features. This system is extremely helpful in recruitment efforts and will enable applicants to apply directly to the NRC via the Web. It also expedites the agency's internal selection process by allowing rating officials and managers to conduct the process electronically. The new system has also streamlined the preparation of vacancy announcements and made our human resources services and processes more effective and efficient.

Leadership and Knowledge Management

In anticipation of a growing number of retirements of senior managers over the next several years, the NRC has implemented two leadership competency development programs in order to prepare the next generation of leaders. These programs, the Senior Executive Service (SES) candidate Development Program and the Leadership Potential Program (LPP) select high-performing individuals and train them for future midlevel and senior-level leadership positions. Since 2001, 23 employees have completed the SES Candidate Development Program and 40 employees have completed the LPP for supervisory leadership positions. The agency has successfully placed 21 SES candidate graduates in SES positions and 17 of the 40 people who graduated from the LLP have been placed in supervisory positions. During FY 2002, the agency selected an additional 22 individuals to participate in the SES Candidate Development Program.

➤ Proposed high-level waste disposal site at Yucca Mountain, Nevada

Performance Culture
Individual performance plans address organizational and program goals. During FY 2002, the NRC worked to better align individual performance plans more closely with agency strategic and performance goals, measures and strategies.

Accountability
The NRC's corporate management strategies, which support the achievement of the agency's strategic goals, provide the overarching framework of the agency's strategic human capital plan.

The NRC is developing an evaluation plan that will employ measures (currently under development) and metrics for each of the strategic human capital goals in order to determine the organization's success in achieving the expected outcomes.

Budget and Performance Integration

The President's Management Agenda has identified a number of initiatives that agencies should address in response to budget and performance integration. For example, over time, agencies should identify high-quality outcome measures, accurately monitor the performance of programs, and begin integrating this information with associated cost. The administration is developing changes that will make budgeting and management in the executive branch more performance oriented and will improve accountability. Ultimately, the administration will encourage agencies to more completely integrate information about costs and program performance in a single oversight process. To address these initiatives, the NRC has pursued and completed a number of actions in FY 2002.

Integrating Planning and Budgeting
The NRC's Planning, Budgeting, and Performance Management (PBPM) process is the fundamental framework for the agency's planning and budgeting. The PBPM process establishes plans that define clear goals to be accomplished and tracks progress during the year to ensure the NRC achieves the desired results. NRC budget accounts are linked to the goals so that the budgetary resources devoted to each goal are clearly established.

The General Accounting Office (GAO) issued a report in January 2002, Managing for Results—*Agency Progress in Linking Performance Plans with Budget and Financial Statements*. The GAO examined whether each agency: (1) linked its performance plans to program activities in its budget, (2) presented funding estimates for expected levels of performance, and (3) clearly indicated how the funding estimates were derived or allocated from the program activities in its budget request. The GAO stated that the "NRC was able to create a clear link between performance and requested funding, and between resources consumed and results."

The GAO also issued a report in November 2002, Managing for Results: Efforts to Strengthen the Link Between Resources and Results at the Nuclear Regulatory Commission. In that report, the GAO described how the PBPM process is used to integrate planning and performance information with budget formulation and execution decisions.

During FY 2002, the NRC prepared a draft management directive that lays out the roles and responsibilities of offices and individuals involved in

performance measurement. The management directive will provide guidance to agency employees on performance measurement. The NRC expects to finalize and implement the management directive in FY 2003.

Full Budgetary Cost

Currently, the NRC captures full budgetary costs and program managers receive cost reports that show the full costs of major programs and activities. These reports allow managers to better plan and manage their programs through the budget year. The NRC will continue to refine the integration of outputs, goals, and full costs as outlined in the OMB guidance for the FY 2005 budget.

Program Effectiveness

The President's Management Agenda requires agencies to be able to document program effectiveness. The analysis should show how program outputs and policies affect desired outcomes. The agency should also be able to demonstrate that program results inform budget decisions.

The NRC conducts program evaluations as part of its PBPM process. For example, in FY 2001, the NRC conducted program evaluations of the revised reactor oversight process and the national materials program. These two programs have major impacts on the regulation of reactors and materials licensees. In FY 2002, the NRC continued its ongoing review of its security programs.

In addition, NRC conducts annual meetings of its Program Review Committee to review the annual budget estimates. At these meetings, the Committee examines policy decisions from the previous year in the context of the NRC's planning and budgetary processes.

Competitive Sourcing

One of the NRC's corporate management strategies is to acquire goods and services efficiently. The agency has continued its strong emphasis on procurement streamlining and innovation as the key to improving the efficiency of the contracting process. In addition, the NRC has established output measures associated with the implementation of the competitive sourcing initiative under the President's Management Agenda, performance-based contracting, and the posting of procurement synopses on the Internet.

Contract management is necessary to ensure that the agency obtains goods and services in an efficient manner consistent with mission needs. It includes the development and implementation of agency-wide contracting policies and procedures, and implementation of the agency's Small Business Program. The primary purpose of the Small Business Program is to ensure that small 8(a), disadvantaged, and women-owned businesses receive a full and fair opportunity to participate in NRC's procurement activities. Contract management also includes the development and application of streamlined procurement processes and adherence to sound business practices in the negotiation, award, administration, and closeout of agency contracts.

In the area of competitive sourcing, the NRC has made significant progress toward achieving the OMB objective of considering a minimum of 15 percent of commercial positions for competitive sourcing by the end of FY 2003. Specifically, the NRC formed an inter-office core team to ensure that competitive

sourcing activities are consistent with the agency plan, which was submitted to OMB on December 12, 2001; to provide guidance and assistance to offices in conducting cost comparisons or direct conversion actions; and to ensure accurate and consistent information for both inherently governmental and commercial positions on Federal Activities Inventory Reform (FAIR) Act inventories. Additionally, the NRC has successfully achieved the administration's goal of subjecting at least 5 percent of the commercial inventory under the FAIR Act to public-private competitions or direct conversions in FY 2002.

The NRC continued to implement performance-based contracting for facility management services, data entry, information technology, and other support services to provide vendors with a better understanding of contract requirements. The NRC includes such criteria as measurable performance requirements, quality standards, quality surveillance plans, and provisions for reduction of fee or price when services are not performed. During FY 2002, NRC exceeded the goal of 20 percent eligible service contracting dollars conducted with performance-based contracts.

The NRC's corporate management strategy to provide proactive information management and information technology services encompasses the Governmentwide reform to expand the applications of online procurement and other E-government services and information. Supporting strategies directly address improving the agency's ability to conduct business electronically and providing external stakeholders with access to publicly available information. During FY 2002, the NRC continued to post on the Governmentwide point-of-entry web site all required synopses for acquisitions valued at over $25,000 and all associated solicitations. In addition, the agency streamlined its paper-intensive ordering and payment functions through increased use of the purchase card.

Expanded Electronic Government

The NRC has actively pursued implementation of the President's Management Agenda goal of expanded electronic government (E-Gov). During FY 2002, the NRC made important strides in utilizing electronic and technological solutions to provide high-quality service to citizens, while reducing the cost of delivering those services

The NRC is currently participating in 13 of the 24 OMB E-Gov initiatives. The agency is making good progress towards integrating its processes for capital planning and investment control (CPIC), Government Information Security Reform Act (GISRA), and enterprise architecture (EA). The agency has also increased its focus on IT system performance measurement and tracking. The NRC is on track for complying with the Government Paperwork Elimination Act (GPEA).

During FY 2002, the agency emphasized the requirements and benefits of E-Gov to key staff and managers. The NRC held a series of briefings and discussions with agency personnel to communicate the value of the E-Gov initiatives. The agency also designed a guidance, oversight and status reporting structure for agency E-Gov activities in order to monitor its progress in furthering the use of E-Gov.

E-Gov Initiatives

Of the 13 initiatives related to E-Gov, the NRC has made the most progress in E-Rulemaking, E-Records, Integrated Acquisitions, E-Clearance, and E-Authentication. The NRC used E-Clearance at the end of 2002 to provide clearance information to

OPM. The NRC has become recognized as a leader in online rulemaking and E-Records management solutions and has shared best practices with initiative partners. As in the E-Clearance effort, as E-Gov solutions begin to materialize, the NRC will assess the impact of these solutions and, where beneficial, begin implementing them.

Other E-Gov initiative accomplishments during FY 2002 include implementation of an integrated payroll and human resources system; membership in the Regulation Community of Practice (E-Reg CoP); service on the Federal Acquisition Management Information System (FAMIS) project; and continued involvement in the Small Agency Council.

Capital Planning and Investment Control

Management Directive 2.2 documents NRC's CPIC process. All of the NRC's major information technology systems have a business case. The NRC has validated the business cases against new criteria (Exhibit 300) required by OMB. The agency incorporated the new criteria into exhibit preparation guidance and trained staff in its use. During FY 2002, the agency applied this new process to about 60 percent of NRC's IT budget for FY 2004. The NRC will continue to review and adopt OMB guidance in this area, implement changes to NRC CPIC process, and update Management Directive 2.2 when necessary.

Enterprise Architecture (EA)

The NRC has made progress in embracing EA. During FY 2002 the agency refined its EA activities to reflect OMB guidance, hired a Senior Enterprise Architect to further improve our EA activities, established a Senior Management Information Technology Advisory Council, reviewed EA best practices, established a revised baseline for the NRC's Technical Reference Model, and included EA in a revised IRM Strategic Plan.

During FY 2003, the NRC will focus on strengthening the integration of EA with CPIC to more effectively link business systems to the agency mission. The agency also intends to develop EA strategy documents, such as an EA Revitalization Plan to facilitate progress improvements in EA. One key document in this area will be a revision of Management Directive 2.1, Information Technology Architecture (Enterprise Architecture). Another important effort will be to issue a technology plan.

Government Information Security Reform Act

To improve information security efforts, the NRC hired a senior IT security officer. An FY 2001 self-assessment of IT security identified some corrective action and the agency made these corrections during FY 2002. The NRC published incident response procedures and established a central repository for security documents and an IT security program tracking system to improve its security efforts. The agency also created and implemented internal security measures to support GISRA. In FY 2003, the NRC plans to update the security policies and procedures in Management Directive 12.5, NRC Automated Information Systems Security Program (ISSO); establish online security courses for users and ISSO's; and perform a self-assessment.

Performance Measures

The NRC verified that all major IT systems are operating within 90 percent of the targets for cost, scheduling, and reliability. The NRC FY 2003 Budget Estimates and Performance Plan included output measures for IT security. The agency is increasing its focus

North Anna Nuclear Power Plant, Richmond, Virginia

on the project control phase of CPIC and will continue to monitor the performance of its major IT systems.

Government Paperwork Elimination Act (GPEA)
The NRC established a GPEA compliance task force during FY 2002 to ensure that it would meet its goal for the GPEA. The NRC completed a survey of its transactions and mapped statute requirements to agency practices to determine which areas need greater attention. The task force will continue to monitor progress monthly. The agency expects to achieve compliance with GPEA requirements by October 2003. (See the following discussion for the Electronic Information Exchange for more information)

Citizen One-Stop Access to the NRC
During FY 2002, the NRC successfully completed the redesign of its external web site to enhance citizen access. New features include media streaming of Commission meetings. In addition, citizens can sign up for electronic information interchange with the Commission, which includes electronic signature capability (See the following discussion for the Electronic Information Exchange for more information).

To enhance public access and public confidence, the new Web site allows access to NRC's public documents in electronic form via the agency's electronic record-keeping system known as ADAMS. Citizens can now access all of NRC's forms on the NRC Website, which includes a single "Contact Us" page covering all major channels for communicating with the agency.

Electronic Information Exchange (EIE)—Minimizing the Burden on Business
The NRC launched the EIE production system during FY 2001. The EIE program is a key component of NRC's E-Gov activities. It provides for the transmission of digitally signed electronic documents to the NRC over the Internet. Information received can be electronically disseminated and loaded directly into the agency's information systems. EIE will also play a major role in enabling the NRC to meet the GPEA requirement to allow the public the option of transacting business with the agency electronically.

In FY 2002, the NRC developed and published a proposed rule and guidance on electronic maintenance and submission of information. This rule will help bring the NRC's communications regulations into compliance with GPEA. It also will expand the number and types of documents that NRC stakeholders and the public can submit electronically.

In FY 2002, the NRC implemented the first version of the High-Level Waste Electronic Hearing Docket (HLW-EHD), which is the official hearing docket of the NRC for DOE's license application to operate a nuclear waste repository at Yucca Mountain. The HLW-EHD was established pursuant to the requirements of 10 CFR 2.1.1013, to receive electronic filings via EIE from parties to the proceedings.

In addition, the NRC established the Licensing Support Network (LSN), which has been operational since October 18, 2001 although no party or potential party has, as yet, made its relevant materials available through the system. The LSN provides shared document discovery and facilitates electronic motions practice for the adjudicatory hearing on DOE's

license application to construct a HLW repository at Yucca Mountain. The LSN is intended to benefit the repository licensing proceeding by making all parties' relevant documents publicly accessible before docketing, ultimately providing the parties with significant information regarding the proposed repository that they can provide to the electronic and publicly accessible docket through a fully electronic filing process.

Productivity Improvements

During FY 2002, the NRC implemented a new seat management contract. This is a performance-based contract that reflects industry best practices in the effective management of IT resources. The contract includes replacement, maintenance, and support of agency desktops, phase-in of desktop support for regions and resident inspector site expansion sites, network printers, and infrastructure.

In FY 2002, NRC relocated all of its archived records from a commercial contractor's site to the National Archives and Record Administration (NARA) Federal Records Center. Relocating the records will allow the NRC to save on records storage and related services. Before FY 2002, the NARA was unable to provide the full services required for managing active archived records. As a result, the NRC had retained the services of a commercial contractor to process and store active archived records.

To be effective and efficient in its IT/IM program, The NRC has established several output measures that gauge its success in providing the support services required by NRC personnel. For example, the agency established measures for the availability of key infrastructure services and of agency network servers for NRC staff. In FY 2002, the NRC achieved a result of 99.6 percent and 99.8 percent respectively, in these two measures.

Improved Financial Management

Financial Management Systems

During FY 2002, the NRC completed several projects designed to meet Federal financial management system requirements and applicable Federal accounting standards as reported by the agency head. The PeopleSoft Human Resources Management System (HRMS) was implemented in November 2001. This facilitated closure of a prior year material weakness and system deficiency associated with accounting for internal use software. The agency also moved its core accounting system needs to the Department of Interior's National Business Center. Lastly, the agency implemented a new cost accounting and reporting system.

During FY 2003, the agency will begin efforts to upgrade the NRC's license fee bill generator system and move to the next version of PeopleSoft software.

Accurate and Timely Financial Information

The NRC's ongoing program to supply agency managers with monthly accounting and budget execution reports and meet external reporting requirements resulted in the following accomplishments:

- The NRC received an unqualified opinion on its financial statements.
- The NRC received the Association of Government Accountant's Certificate of Excellence in Accountability Reporting award for its FY 2001 Performance and Accountability Report.

- The agency published standard cost management ratios in the agency's monthly Budget Execution Report for agency managers.
- The agency provided core accounting system reports electronically on the users' desktop computers to reduce costs and improve timeliness.
- The NRC's external reporting activities met Treasury's standards for timeliness, reconciliation, reliability, and consistency.
- The agency issued quarterly cost management reports to agency managers for FY 2002.

Integrated Financial and Performance Management Systems for Day-to-Day Operations.
Core accounting is integrated with HRMS (i.e., personnel, payroll, and labor reporting) and fee collection systems. The agency also provides managers with desktop electronic access to daily financial data and to periodic summarized reports. Senior managers receive monthly budget execution reports, agency standard cost ratios, and performance data. In the current year, the agency deployed the first phase of a cost accounting reporting application.

Annual Financial Statements and Internal Controls
The NRC began preparing interim financial statements one year ahead of OMB's requirements. A complete set of principal statements and footnotes for the period ending March 31, 2002, were submitted in a timely fashion. The agency also made substantial progress in addressing the material weakness associated with incomplete implementation of the accounting standard for managerial cost accounting. Corrective action included using data from the cost accounting system to prepare the statement of net cost and issuing quarterly cost management reports to agency managers.

The agency received an unqualified audit opinion on its annual financial statements and had one material internal control weakness reported by its auditors. When the financial statement audit report is issued in January 2003, an action plan will be established to correct any remaining issues.

Strategies for submitting *the FY 2002 Performance and Accountability Report* by February 1, 2003, included:

- Establishment of an integrated schedule for preparing the performance report, financial statements, and completing the audit in a timely manner;
- Preparation of all principal statements and footnotes for the period ending March 31;
- Preparation of principal statements for the quarter ended June 30; and
- Establishment a target date of December 20, 2002, for completing the audit of the FY 2002 financial statements.

For the FY 2002 financial statements included in the Performance and Accountability Report, the agency incorporated quarterly financial statements into the FY 2002 annual audit process and is in the process of establishing an internal performance and accountability report acceleration committee to meet the November 15, 2004, OMB due date.

DATA SOURCES AND QUALITY

The NRC's data collection and analysis methods are largely driven by the regulatory mandate entrusted to it by Congress. 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, to promote the common defense and security, and to protect the environment. 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 abnormal occurrence (AO) criteria were developed by NRC in order to comply with the legislative intent of the Act to determine which events should be considered significant. Events that meet the AO criteria are included in an annual Report to Congress on Abnormal Occurrences (NUREG-0090).

Most of the data used to measure the strategic goals and the performance goals focused on maintaining safety are attained or derived from the NRC's AO data and reports submitted by NRC licensees and Agreement States.

One important characteristic of the data used in this report is that the data normally originate from external sources such as Agreement States and NRC licensees. The NRC believes these data to be credible because (1) the information needed from external sources is required to be reported to the NRC by regulations, (2) the NRC maintains an aggressive inspection program that, among other activities, audits licensees programs and evaluates Agreement State programs to determine that information is being reported as required by the regulations, and (3) there are agency procedures for reviewing and evaluating licensees. The NRC employs database systems that support this process, including the Sequence Coding and Search System (SCSS), the Accident Sequence Precursor (ASP) Database, the Nuclear Materials Events Database (NMED), and the Radiation Exposure Information Report System (REIRS).

The NRC has established procedures for the systematic review and evaluation of events reported by NRC licensees 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 the technical accuracy of event information reported to NRC. Such sources include: (1) the NRC licensee reports themselves, which are carefully analyzed, (2) NRC inspection reports, (3) Agreement State reports, (4) periodic review of Agreement State regulatory programs, (5) NRC consultant/contractor reports, and (6) U.S. Department of Energy Operating Experience Weekly Summaries. In addition, daily interaction and exchange of event information occurs between headquarters and regional offices, and periodic conference calls are placed between headquarters, the region, and Agreement States to discuss event information. Events identified that meet the abnormal occurrence criteria are validated and verified by all applicable NRC headquarters program offices, regional offices, and agency management prior to submission to Congress.

➤ A license renewal steering committee public meeting

Data Security

Data security is provided by the agency's computer security program. This program provides administrative, technical, and physical security measures for the protection of the agency's information, automated information systems, and information technology infrastructure. This includes special safeguards to protect classified information, unclassified safeguards information, and sensitive unclassified information that is processed, stored, or produced on certain types of automated information systems.

Improvements in Performance Data

The NRC analyzed its data verification procedures for all of its performance measures during FY 2001. The analysis consisted of an evaluation of the data collection, data 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 valid and reliable.

Following the analysis of data verification procedures, the development of a Management Directive for our performance management system was begun during FY 2002. The Management Directive establishes responsibilities within the agency for our performance measurement system and standards for performance goals and measures. This directive will provide guidance to agency personnel on procedures to follow in using the performance measurement system.

A more complete discussion of validation and verification for NRC measures and metrics is included in the NRC FY 2002 Budget Estimates and Performance Plan (NUREG-1100, Vol. 17) submitted to Congress.

An extensive explanation of data verification and validation procedures for each performance measure is included with the Performance Plan, in Appendix IV.

The NRC makes performance data information accessible to citizens through our web page. For example, if a citizen wanted to verify and/or know more about the licensee event reports, which are the raw data for most of our performance measures, they can be retrieved through our Agencywide Documents Access and Management System (ADAMS) under "licensee event report," which is available on the NRC Web site at www.nrc.gov/reading-rm/adams.html.

AGA

CERTIFICATE OF EXCELLENCE IN ACCOUNTABILITY REPORTING

Presented to the

Nuclear Regulatory Commission

In recognition of your outstanding efforts in preparing NRC's Performance and Accountability Report for the fiscal year ended September 30, 2001.

A Certificate of Excellence in Accountability Reporting is presented by the Association of Government Accountants to federal government agencies whose annual Accountability Reports or Performance and Accountability Reports achieve the highest standards in presenting their programs and financial affairs.

John H. Hummel, CGFM
Chair, Certificate of Excellence
in Accountability Reporting Board

Charles W. Culkin Jr., CGFM
Executive Director

CHAPTER 3:
AUDITORS' REPORTS and FINANCIAL STATEMENTS

A MESSAGE FROM THE CHIEF FINANCIAL OFFICER

I am pleased to present the U.S. Nuclear Regulatory Commission's financial statements for FY 2002, an integral part of the agency's FY 2002 Performance and Accountability Report. Our independent auditor has rendered an unqualified opinion on our financial statements for the ninth consecutive year. This opinion attests to the fact that NRC's financial statements are fairly presented, and demonstrates discipline and accountability in the execution of our responsibilities as stewards of the American taxpayers' dollars.

I note with great pride, the NRC's receipt of the Association of Government Accountants' Certificate of Excellence in Accountability Reporting for its FY 2001 Performance and Accountability Report. This award recognizes outstanding reporting and is one of the highest forms of recognition for Federal performance and financial reporting.

During FY 2002, we continued to improve our capability to provide timely, accurate, and useful financial information. This included successfully implementing three new financial management systems. Cross-servicing of the agency's core accounting system was transferred to a new service provider resulting in reduced costs, more timely information, and resolution of a substantial non-compliance with the Federal Financial Management Improvement Act. We also implemented an integrated human resources, payroll, and time and labor system. This system provides us with a single-input vehicle for time, attendance, and labor reporting. It also resolved a material internal control weakness and substantial non-compliance with the Federal Financial Management Improvement Act. The third system implemented was a managerial cost accounting system that provides agency managers with cost information. We plan to resolve the material weakness identified by the auditors in the cost accounting system during FY 2004.

As of September 30, 2002, the financial condition of the NRC is sound. We continued to control our funds to ensure our budget authority was not exceeded. We successfully collected approximately $476 million in fees paid by NRC licensees, or approximately 99 percent of the agency's budget that is subject to fees. Our year-end delinquent debt was only $2 million or less than one-half of one percent of the fees collected. Payments to commercial vendors subject to the Prompt Payment Act were 87 percent on-time, and 99 percent of payments were made electronically. Improper payments were limited to less than one-half of one percent of payments made.

The NRC is committed to effective and efficient management of its resources, implementing the President's Management Agenda, and meeting future challenges. Our goals and strategies for improving financial management are centered on maintaining unqualified audit opinions, eliminating material internal control weaknesses, meeting new and accelerated reporting requirements, and implementing E-Government initiatives.

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. While we make progress, we are mindful of our support role in getting an unqualified audit opinion on the *Financial Report of the United States Government*.

I anticipate another productive year in 2003 and look forward to reporting our successes next year.

Jesse L. Funches
January 21, 2003

➤ NRC Inspection activities at the Peach Bottom Nuclear Power Plant, Lancaster, Pennsylvania

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 2002 financial statements were audited by R. Navarro and Associates under contract to the NRC's Office of the Inspector General.

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

OFFICE OF THE
INSPECTOR GENERAL

January 24, 2003

MEMORANDUM TO: Chairman Meserve

FROM: Hubert T. Bell
Inspector General

SUBJECT: RESULTS OF THE AUDIT OF THE U.S. NUCLEAR REGULATORY COMMISSION'S FISCAL YEAR 2002 FINANCIAL STATEMENTS (OIG-03-A-04)

Attached is the independent auditors' report on the U.S. Nuclear Regulatory Commission's (NRC) financial statements for the years ended September 30, 2002 and 2001. The Chief Financial Officers Act requires the Office of the Inspector General (OIG) to annually audit NRC's Principal Financial Statements. The report contains: (1) the principal statements and the auditors' opinion on those statements; (2) the opinion on management's assertion about the effectiveness of internal controls; and (3) a report on NRC's compliance with laws and regulations. Written comments from the Chief Financial Officer (CFO) are included as an appendix to the report.

Audit Results

The independent auditors issued an unqualified opinion on the balance sheet and the statements of changes in net position, net cost, budgetary resources, and financing.

In the report on management's assertion about the effectiveness of internal controls, the auditors concluded that management's assertion is not fairly stated. The auditors reached this conclusion because management did not identify managerial cost accounting as a material weakness.[1]

The auditors identified three new reportable conditions and one prior-year reportable condition. The new conditions concern cost accounting implementation, accounting for internal use software use monitoring and external reporting of financial information.

[1] OIG's annual assessment of NRC's implementation of the Federal Manager's Financial Integrity Act will also report the same issue as a material weakness.

The report on NRC's compliance with laws and regulations disclosed three prior-year noncompliances. The first is that NRC did not comply with Executive Order 13103, *Computer Software Piracy*. The second is that NRC's 10 CFR Part 170 license fee rates are not based on full cost, and the third is that NRC is in substantial non-compliance with the Federal Financial Management Improvement Act of 1996 (FFMIA). The specific issue related to FFMIA is that managerial cost accounting was implemented, but did not meet federal accounting and systems requirements.

The prior year's reportable condition relating to business continuity for NRC's general ledger system is closed. Tests of compliance with selected provisions of other laws and regulations disclosed no other instances of noncompliance.

Performance Reporting

Office of Management and Budget Bulletin No. 01-02, *Audit Requirements for Federal Financial Statements*, requires OIG to "obtain an understanding of the components of internal control relating to the existence and completeness assertions relevant to the performance measures included in the MD&A [Management's Discussion and Analysis]." The Bulletin states that the objective of this work is to report deficiencies in the design of internal control, rather than plan the financial statement audit. With this objective in mind, OIG examined the control process for several performance measures. Our examination concluded that there were no deficiencies to report.

Comments of the Chief Financial Officer

The CFO generally agreed with the auditors' recommendations and stated that corrective action has been taken or is underway. We will follow-up on the CFO's corrective actions during FY 2003.

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

Attachment: As stated

cc: Commissioner Dicus
Commissioner Diaz
Commissioner McGaffigan
Commissioner Merrifield

R. NAVARRO
& ASSOCIATES, INC.
CERTIFIED PUBLIC ACCOUNTANTS

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

INDEPENDENT AUDITORS' REPORT

Chairman Richard A. Meserve
U.S. Nuclear Regulatory Commission
Rockville, Maryland

We have audited the accompanying balance sheets of the U.S. Nuclear Regulatory Commission (NRC) as of September 30, 2002 and 2001, and the related statements of net cost, changes in net position, budgetary resources, and financing for the years then ended, collectively referred to as the financial statements. These financial statements are the responsibility of the management of NRC. Our responsibility is to express an opinion on these financial statements based on our audits.

SCOPE

We conducted our audits in accordance with auditing standards generally accepted in the United States of America, *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*. 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 our audit provides a reasonable basis for our opinion.

MATTERS FOR EMPHASIS

Classification of Costs

OMB Bulletin 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 01-09 requires that the Statement of Net Cost be presented using full program costs by output. The agency uses a program definition referred to as a strategic arena, which does not readily reflect or provide linkage to the NRC's outputs.

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 $54.4 and $46.6 million, respectively for the years ended September 30, 2002 and 2001 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 General Accounting 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.

OPINION

In our opinion, the financial statements referred to in the first paragraph, present fairly, in all material respects, the financial position of NRC as of September 30, 2002 and 2001, and its net cost, changes in net position, budgetary resources, and reconciliation of budgetary obligations to net cost for the years then ended in conformity with accounting principles generally accepted in the United States of America.

As discussed in Note 1.B. of the Notes to the Principal Statements, OMB Bulletin No. 01-09, *Form and Content of Agency Financial Statements*, redefined the form of the principal statements and the content of the entity's budget resources that are includable in the principal statements, thereby causing a change in reporting entity. Accordingly, the principal statements for the period and year ended September 30, 2001, have been restated to conform to the September 30, 2002, presentation.

Our audits were conducted for the purpose of forming an opinion on the financial statements taken as a whole. The Management Discussion and Analysis and the required supplementary information on pages 106-107 is not a required part of the financial statements but is information required by OMB Bulletin No. 01-09, *Form and Content of Agency Financial Statements.* This supplementary information is the responsibility of NRC's management. 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 such information and we do not express an opinion on it.

In accordance with *Government Auditing Standards* issued by the Comptroller General of the United States and OMB Bulletin No. 01-02*, Audit Requirements for Federal Financial Statements*, we have also issued our report dated December 13, 2002, on our consideration of NRC's internal control over financial reporting and our tests of its compliance with certain provisions of laws, regulations, contracts, and grants. That report is an integral part of this engagement to perform an audit in accordance with *Government Auditing Standards* and should be read in conjunction with this report in considering the results of our audits.

December 13, 2002

R. Navarro & Associates, Inc.

PRINCIPAL STATEMENTS

BALANCE SHEET
(Dollars in Thousands)

As of September 30,	2002	Restated 2001
Assets		
Intragovernmental		
Fund balances with Treasury (Note 2)	**$ 181,449**	$ 140,465
Accounts receivable (Note 3)	**2,031**	2,549
Other	**1,141**	1,144
Total intragovernmental	**184,621**	144,158
Cash and other monetary assets	**20**	20
Accounts receivable, net (Note 3)	**42,774**	48,905
Property and equipment, net (Note 4)	**36,922**	43,788
Other	**20**	15
Total Assets	**$ 264,357**	$ 236,886
Liabilities		
Intragovernmental		
Accounts payable	**$ 8,411**	$ 12,734
Other (Notes 5 and 6)	**49,157**	56,411
Total intragovernmental	**57,568**	69,145
Accounts payable	**19,996**	15,774
Federal employees benefits (Notes 1.K. and 6)	**9,062**	10,849
Other liabilities (Note 5)	**49,869**	47,445
Total Liabilities	**136,495**	143,213
Net Position		
Unexpended appropriations	**128,336**	86,980
Cumulative results of operations (Note 8)	**(474)**	6,693
Total Net Position	**127,862**	93,673
Total Liabilities and Net Position	**$ 264,357**	$ 236,886

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,	2002	Restated 2001
Nuclear Reactor Safety		
Intragovernmental gross costs	$ **102,729**	$ 101,541
Less: Intragovernmental earned revenue	**(22,914)**	(20,820)
Intragovernmental net costs	**79,815**	80,721
Gross costs with the public	**259,855**	233,995
Less: Earned revenues from the public	**(383,157)**	(372,513)
Net costs with the public	**(123,302)**	(138,518)
Total Net Cost of Nuclear Reactor Safety	**(43,487)**	(57,797)
Nuclear Materials Safety		
Intragovernmental gross costs	**21,956**	19,851
Less: Intragovernmental earned revenue	**(4,748)**	(4,555)
Intragovernmental net costs	**17,208**	15,296
Gross costs with the public	**64,852**	59,292
Less: Earned revenues from the public	**(43,375)**	(45,223)
Net costs with the public	**21,477**	14,069
Total Net Cost of Nuclear Materials Safety	**38,685**	29,365
Nuclear Waste Safety		
Intragovernmental gross costs	**22,107**	24,160
Less: Intragovernmental earned revenue	**(1,762)**	(1,119)
Intragovernmental net costs	**20,345**	23,041
Gross costs with the public	**66,609**	61,931
Less: Earned revenues from the public	**(14,793)**	(17,517)
Net costs with the public	**51,816**	44,414
Total Net Cost of Nuclear Waste Safety	**72,161**	67,455
International Nuclear Safety Support		
Intragovernmental gross costs	**4,782**	6,151
Less: Intragovernmental earned revenue	**(329)**	-
Intragovernmental net costs	**4,453**	6,151
Gross costs with the public	**9,470**	7,695
Less: Earned revenues from the public	**(2,034)**	(2,233)
Net costs with the public	**7,436**	5,462
Total Net Cost of International Nuclear Safety Support	**11,889**	11,613
Net Cost of Operations	$ **79,248**	$ 50,636

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

PRINCIPAL STATEMENTS

STATEMENT OF CHANGES IN NET POSITION

(Dollars in Thousands)

For the year ended September 30,	2002		Restated 2001	
	Cumulative Results	**Unexpended Appropriations**	Cumulative Results	Unexpended Appropriations
Beginning Balances	**$ 6,693**	**$ 86,980**	$ 9,078	$ 87,073
Prior Period Adjustment (Note 13)	**-**	**-**	-	141
Beginning balances, as adjusted	**6,693**	**86,980**	9,078	87,214
Budgetary Financing Sources				
Appropriations received	**-**	**535,430**	-	465,800
Appropriations transferred-in/out	**-**	**(448,676)**	-	(428,920)
Other adjustments	**-**	**(430)**	-	(27)
Appropriations used	**44,968**	**(44,968)**	37,087	(37,087)
Non-exchange revenue	**1,354**	**-**	657	-
Transfers-in/out without reimbursement	**(1,354)**	**-**	(657)	-
Other Financing Sources				
Imputed financing from costs absorbed by others	**18,780**	**-**	17,209	-
Other	**8,333**	**-**	(6,045)	-
Total financing sources	**72,081**	**41,356**	48,251	(234)
Net Cost of Operations	**(79,248)**	**-**	(50,636)	-
Ending Balances	**$ (474)**	**$ 128,336**	$ 6,693	$ 86,980

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,	2002	Restated 2001
Budgetary Resources		
Budget authority		
Appropriations received	**$ 535,430**	$ 465,800
Net transfers	**23,650**	21,466
Unobligated balances	**-**	-
Beginning of period	**26,747**	28,580
Spending authority from offsetting collections	**-**	-
Reimbursements earned	**5,845**	5,194
Change in unfilled customer orders	**201**	(1,042)
Total Spending Authority from Offsetting Collections	**6,046**	4,152
Recoveries of prior year obligations	**4,634**	7,462
Permanently not available	**(430)**	(27)
Total Budgetary Resources	**$ 596,077**	$ 527,433
Status of Budgetary Resources		
Obligations incurred (Note 12)		
Direct	**$ 553,083**	$ 497,784
Reimbursable	**5,648**	2,902
Unobligated balance	**-**	-
Apportioned	**36,179**	25,695
Exempt from apportionment	**1,167**	1,052
Total Status of Budgetary Resources	**$ 596,077**	$ 527,433
Relationship of Obligations to Outlays		
Obligated balance, net, beginning of period	**$ 104,988**	$ 99,991
Obligated balance, net, end of period		
Accounts receivable	**(539)**	(429)
Unbilled customer orders from Federal sources	**(1,788)**	(2,026)
Undelivered orders	**88,346**	58,484
Accounts payable	**50,880**	48,959
Obligated balance, net, end of period	**$ 136,899**	$ 104,988
Outlays		
Disbursements	**$ 522,314**	$ 488,545
Collections	**(6,175)**	(4,470)
Subtotal	**516,139**	484,075
Less: Offsetting Receipts	**(475,965)**	(453,348)
Net Outlays	**$ 40,174**	$ 30,727

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

PRINCIPAL STATEMENTS

STATEMENT OF FINANCING
(Dollars in Thousands)

For the year ended September 30,	2002	Restated 2001
Resources Used to Finance Activities		
Budgetary Resources Obligated		
Obligations incurred (Note 12)	**$ 558,731**	$ 500,686
Less: Spending authority from offsetting collections and recoveries	**(10,680)**	(11,615)
Obligations Net of Offsetting Collections and Recoveries	**548,051**	489,071
Less: Offsetting receipts	**(475,965)**	(453,348)
Net Obligations	**72,086**	35,723
Other Resources		
Imputed financing from costs absorbed by others	**18,780**	17,209
Allocation transfer	**3,375**	2,602
Other	**8,333**	(6,045)
Net Other Resources Used to Finance Activities	**30,488**	13,766
Total Resources Used to Finance Activities	**102,574**	49,489
Resources Used to Finance Items not Part of the Net Cost of Operations		
Change in budgetary resources obligated for goods, services and benefits ordered but not yet provided	**(30,493)**	(1,239)
Resources that finance the acquisition of assets	**(2,476)**	(9,409)
Other	**364**	596
Total Resources Used to Finance Items not Part of the Net Cost of Operations	**(32,605)**	(10,052)
Total Resources Used to Finance the Net Cost of Operations	**69,969**	39,437

(Continued)

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

PRINCIPAL STATEMENTS

Components of the Net Cost of Operations that will not Require or Generate Resources in the Current Period		
Components Requiring or Generating Resources in the Future Periods		
Increase in annual leave liability	**1,870**	846
(Decrease) Increase Actuarial Workers' Compensation	**(1,787)**	2,619
Increase in Unfunded Workers' Compensation	**28**	260
Increase in Unfunded Unemployment	**22**	-
Total Components of Net Cost of Operations that will Require or Generate Resources in Future Periods	**133**	3,725
Components not Requiring or Generating Resources:		
Depreciation and amortization	**9,146**	7,474
Total Components not Requiring or Generating Resources	**9,146**	7,474
Total Components of Net Cost of Operations that will not Require or Generate Resources in the Current Period	**9,279**	11,199
Net Cost of Operations	**$ 79,248**	$ 50,636

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 and Restatement

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.

In accordance with OMB Bulletin 01-09, NRC made several changes to its principal financial statements and notes. Amounts for FY 2001 were restated for the new formats for the statements of Net Cost, Changes in Net Position, Budgetary Resources, and Financing and to reflect only direct, NRC appropriations. NRC has not prepared a Statement of Custodial Activity because the amounts involved are immaterial and are 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.

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 heath 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 28 years, Congress has enacted no-year appropriations, which are available for obligation by NRC until expended. The Energy and Water Development Appropriations Act, 2001, requires the NRC to recover approximately 96 percent of its new budget authority of $558.6 million by assessing fees less amounts derived from the Nuclear Waste Fund of $23.7 million, amounts received for Homeland Security of $36 million. The $558.6 million does not include $3.7 million transferred from the U.S. Agency for International Development. In addition, NRC's appropriation was reduced by $430,000 through a recission of funding in accordance with P. L. 107-206. For FY 2001, NRC recovered approximately 98 percent of its new budget authority of $487.3 million less amounts derived from the Nuclear Waste Fund of $21.6 million and $3.2 million from the General Fund.

D. *Basis of Accounting*

Transactions are recorded on both an accrual accounting basis and on a budgetary 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'

NOTES TO PRINCIPAL STATEMENTS

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 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 $27,000 and $133,000 at September 30, 2002, and 2001, 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 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.

NRC adopted Statement of Federal Financial Accounting Standards No. 10, *Accounting for Internal Use Software*, effective October 1, 2000. The standard requires the capitalization of the costs of internal use software and provides guidance on capitalization thresholds, capitalization timing, and cost elements to capitalize, including the full cost of salaries and benefits for agency personnel involved in software development.

J. Accounts Payable

Accounts payable represent vendor invoices for services received by NRC that will be paid at a later date. Also included in these amounts are holdbacks on contracts that have not been fully closed and advances that represent collections received in advance of performing services under a variety of reimbursable agreements. The services will be provided and the revenue earned 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, 2002, and 2001, respectively.

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 was 5.20 percent for FY 2002 and 5.21 percent for FY 2001.

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 2002 and FY 2001, 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 withholds 7 percent of base pay earnings. The NRC matches this withholding with an 8.51 percent contribution.

NOTES TO PRINCIPAL STATEMENTS

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 one percent of base pay to their account and matches contributions up to an additional four percent. The maximum percentage of base pay that an employee participating in FERS may contribute is 12 percent in calendar year (CY) 2002, and 11 percent in CY 2001. Employees belonging to CSRS may contribute up to 7 percent of their salary in CY 2002, but there is no NRC matching of the contribution. The maximum amount that either FERS or CSRS employees may contribute to the plan is $11,000 in the CY 2002 portion of FY 2002 and $10,500 in the CY 2001 portion of FY 2002. 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 in various NRC facilities. The leases are for 3 and 5 years and the interest rates paid were 6.59 percent and 4.75 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.

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 Intra-governmental 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.

NOTES TO PRINCIPAL STATEMENTS

NOTE 2. FUND BALANCES WITH TREASURY

(In thousands)	2002	2001
Fund Balances		
Appropriated funds	$ 174,226	$ 131,716
Allocation transfers	6,941	5,872
Other fund types	282	2,877
Total	$ 181,449	$ 140,465
Status of Fund Balance with Treasury		
Unobligated Balance		
Available		
Appropriated funds	$ 37,346	$ 26,747
Allocation transfers	1,809	1,570
Unavailable	612	587
Obligated balance not yet disbursed	141,682	111,561
Total	$ 181,449	$ 140,465

NOTE 3. ACCOUNTS RECEIVABLE

(In thousands)	2002	2001
Intragovernmental		
Receivables and reimbursements	$ 2,031	$ 2,549
Receivables with the Public		
Materials and facilities fees - billed	$ 4,166	$ 10,445
Materials and facilities fees - unbilled	41,185	41,300
Other (Penalties and Interest)	94	222
Total Accounts Receivable	45,445	51,967
Less: Allowance for uncollectible accounts	(2,671)	(3,062)
Accounts Receivable, Net	$ 42,774	$ 48,905

NOTE 4. PROPERTY AND EQUIPMENT, NET

(In thousands)

Fixed Assets Class	Service Years	Acquisition Value	Accumulated Depreciation and Amortization	2002 Net Book Value	2001 Net Book Value
Equipment	5-8	$ 18,548	$ (16,552)	**$ 1,996**	$ 2,819
ADP software	5	64,557	(40,839)	**23,718**	14,475
ADP software under development	-	390	-	**390**	14,707
Leasehold improvements	20	19,805	(9,102)	**10,703**	11,629
Leasehold improvements in progress		115	-	**115**	158
		$ 103,415	$ (66,493)	**$ 36,922**	$ 43,788

NOTE 5. OTHER LIABILITIES

(In thousands)	2002	2001
Intragovernmental liability to offset net accounts receivable for fees assessed	**$ 44,177**	$ 50,813
Liability from fees collected which will offset subsequent year's appropriations	**-**	1,724
Liability to offset miscellaneous accounts receivable	**27**	133
Liability for advances from other agencies	**845**	-
Accrued workers' compensation	**1,809**	1,780
Accrued unemployment compensation	**22**	-
Employee benefit contributions	**2,277**	1,961
Total Intragovernmental Other Liabilities	**$ 49,157**	$ 56,411

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)	2002	2001
Accrued annual leave	**$ 28,343**	$ 26,473
Accrued salaries	**18,092**	16,143
Contract holdbacks, advances, and other	**3,434**	4,829
Total Other Liabilities	**$ 49,869**	$ 47,445

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

NOTES TO PRINCIPAL STATEMENTS

NOTE 6. LIABILITIES NOT COVERED BY BUDGETARY RESOURCES

(In thousands)	2002	2001
Intragovernmental		
FECA paid by DOL	**$ 1,809**	$ 1,780
Accrued unemployment compensation	**22**	-
Federal Employee Benefits		
Future FECA	**9,062**	10,849
Other		
Accrued annual leave	**28,343**	26,473
Capital lease liability	**80**	167
Total Liabilities not Covered by Budgetary Resources	**$ 39,316**	$ 39,269

NOTE 7. LEASES

(In thousands)
Future Lease Payments Due:

Fiscal Year	Capital	Operating	2002	2001
2002	$ -	$ -	**$ -**	$ 19,598
2003	78	20,415	**20,493**	19,550
2004	2	20,505	**20,507**	19,565
2005	-	20,372	**20,372**	19,431
2006	-	19,560	**19,560**	18,619
2007 and thereafter	-	132,494	**132,494**	120,205
Total	80	213,346	**213,426**	216,968
Less: imputed interest	(2)	-	**(2)**	(9)
Total Future Lease Payments	$ 78	$ 213,346	**$ 213,424**	$ 216,959

NOTE 8. CUMULATIVE RESULTS OF OPERATIONS

(In thousands)	2002	2001
Future funding requirements	**$ (39,236)**	$ (39,102)
Investment in property and equipment, net	**36,922**	43,788
Contributions from foreign cooperative research agreements	**1,819**	1,984
Other	**21**	23
Cumulative Results of Operations	**$ (474)**	$ 6,693

Future funding requirements represent the amount of future funding needed to pay the accrued unfunded expenses as of September 30, 2002, and 2001. 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)	2002	2001
Fees for licensing, inspection, and other services	**$ 467,632**	$ 459,392
Revenue from reimbursable work	**5,480**	4,588
Total Exchange Revenues	**$ 473,112**	$ 463,980

NOTE 10. BUDGET FUNCTIONAL CLASSIFICATION

(In thousands)

Functional Classification	Gross Cost	Earned Revenue	2002 Net Cost	2001 Net Cost
276 - Energy Information, Policy, & Regulation	$ 549,549	$ 472,842	**$ 76,707**	$ 47,852
150 - AID International Affairs	2,811	270	**2,541**	2,784
Total	$ 552,360	$ 473,112	**$ 79,248**	$ 50,636

Intragovernmental

Functional Classification	Gross Cost	Earned Revenue	2002 Net Cost	2001 Net Cost
276 - Energy Information, Policy, & Regulation	$ 148,763	$ 29,483	**$ 119,280**	$ 123,559
150 - AID International Affairs	2,811	270	**2,541**	1,650
Total	$ 151,574	$ 29,753	**$ 121,821**	$ 125,209

NOTE 11. FINANCING SOURCES OTHER THAN EXCHANGE REVENUE

(In thousands)

Appropriated Funds Used

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

	2002	2001
Appropriated funds consumed	**$ 520,933**	$ 490,435
Less: collection from fees assessed	**(475,965)**	(453,348)
Appropriation used	**$ 44,968**	$ 37,087

Appropriated funds consumed includes $26.7 million and $28.6 million through September 30, 2002, and 2001, respectively, of available funds from prior years.

NOTES TO PRINCIPAL STATEMENTS

Non-Exchange Revenue

	2002	2001
Civil penalties	$ 453	$ 345
Miscellaneous receipts	901	312
Total Non-Exchange Revenue	$ 1,354	$ 657

The miscellaneous receipts received during FY 2002 included approximately $554,000 received from the Trust Estate of the Moab Mill Reclamation Trust Agreement. The receipts resulted from an agreement between the State of Utah and NRC where it was agreed that each party would receive 50 percent of the proceeds from the trust.

Imputed Financing

	2002	2001
Civil Service Retirement System	$ 9,934	$ 9,676
Federal Employee Health Benefit	8,788	7,486
Federal Employee Group Life Insurance	49	47
U.S. Treasury Judgment Fund	9	-
Total Imputed Financing	$ 18,780	$ 17,209

Transfers In/Out

	2002	2001
Transfers out to Treasury		
License Fees	$ 475,965	$ 453,348
Non-exchange revenue	1,354	657
Total Transfer-Out to Treasury	$ 477,319	$ 454,005

NOTE 12. TOTAL OBLIGATIONS INCURRED

(In thousands)

The Total Obligations Incurred consist of the following:

Direct Obligations	2002	2001
Category A	$ 529,517	$ 476,184
Exempt from Apportionment	23,566	21,600
Total Direct Obligations	553,083	497,784
Reimbursable Obligations	5,648	2,902
Total Obligations Incurred	$ 558,731	$ 500,686

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. PRIOR-PERIOD ADJUSTMENT

The prior-period adjustment of approximately $141,000 represents the reversal of previously recorded expended appropriations related to contract close-outs and contract hold-backs. The adjustment increased unexpended appropriations by approximately $141,000, decreased accounts payable by approximately $85,000, and decreased other liabilities by approximately $56,000.

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF INTRAGOVERNMENTAL ASSETS AND LIABILITIES
(Dollars in Thousands)

As of September 30	2002	2001
Intragovernmental Assets		
Fund Balance with Treasury		
Department of the Treasury	**$ 181,449**	$ 140,465
Accounts Receivable		
Tennessee Valley Authority	**1,197**	1,283
Department of Energy	**412**	817
Other Agencies	**422**	449
Total Accounts Receivable	**2,031**	2,549
Other Assets		
Department of Commerce	**360**	29
Department of Interior	**1**	486
Department of the Navy	**19**	11
Department of Labor	**204**	256
General Services Administration	**520**	329
Other Agencies	**37**	33
Total Other Agencies	**1,141**	1,144
Total Intragovernmental Assets	**$ 184,621**	$ 144,158

As of September 30	2002	2001
Intragovernmental Liabilities		
Accounts Payable		
General Services Administration	**$ 3,157**	$ 7,841
Department of Energy	**4,500**	4,082
Other Agencies	**754**	811
Total Accounts Payable	**8,411**	12,734
Other Liabilities		
Department of Labor	**1,831**	1,781
Department of the Treasury - General Fund	**44,177**	52,670
Office of Personnel Management	**2,277**	1,960
Other Agencies	**872**	-
Total Other Liabilities	**49,157**	56,411
Total Intragovernmental Liabilities	**$ 57,568**	$ 69,145

REQUIRED SUPPLEMENTARY INFORMATION

SCHEDULE OF BUDGETARY RESOURCES
(Dollars in Thousands)

For the year ended September 30, 2002

	X0200	X0300	Total
Budgetary Resources			
Budget authority			
Appropriations received	$ 529,250	$ 6,180	**$ 535,430**
Net transfers	23,650	-	**23,650**
Unobligated balances			
Beginning of period	26,027	720	**26,747**
Spending authority from offsetting collections			
Reimbursements earned	5,833	12	**5,845**
Change in unfilled customer orders	201	-	**201**
Total Spending Authority from Offsetting Collections	6,034	12	**6,046**
Recoveries of prior year obligations	4,384	250	**4,634**
Permanently not available	(430)	-	**(430)**
Total Budgetary Resources	$ 588,915	$ 7,162	**$ 596,077**
Status of Budgetary Resources:			
Obligations incurred			
Direct	$ 546,855	$ 6,228	**$ 553,083**
Reimbursable	5,648	-	**5,648**
Unobligated balance			
Apportioned	35,245	934	**36,179**
Exempt from apportionment	1,167	-	**1,167**
Total Status of Budgetary Resources	$ 588,915	$ 7,162	**$ 596,077**
Relationship of Obligations to Outlays:			
Obligated balance, net, beginning of period	$ 104,078	$ 910	**$ 104,988**
Obligated balance, net end of period:			
Accounts receivable	(527)	(12)	**(539)**
Unbilled customer orders from Federal sources	(1,788)	-	**(1,788)**
Undelivered orders	87,808	538	**88,346**
Accounts Payable	50,475	405	**50,880**
Obligated balance, net , end of period	$ 135,968	$ 931	**$ 136,899**
Outlays:			
Disbursements	$ 516,369	$ 5,945	**$ 522,314**
Collections	(6,175)	-	**(6,175)**
Subtotal	510,194	5,945	**516,139**
Less: Offsetting Receipts	(470,032)	(5,933)	**(475,965)**

R. NAVARRO & ASSOCIATES, INC.
CERTIFIED PUBLIC ACCOUNTANTS

REPORT ON MANAGEMENT'S ASSERTION ABOUT THE EFFECTIVENESS OF INTERNAL CONTROL

Chairman Richard A. Meserve
U.S. Nuclear Regulatory Commission
Rockville, Maryland

We have examined management's assertion that the U.S. Nuclear Regulatory Commission's (NRC) systems of accounting and internal control in place as of September 30, 2002, are in compliance with the internal control objectives defined in Office of Management and Budget (OMB) Bulletin No. 01-02, Audit Requirements for Federal Financial Statements. The Bulletin states that transactions should be properly recorded, processed, and summarized to enable the preparation of the principal statements in accordance with Federal accounting standards, and assets are to be safeguarded against loss from unauthorized acquisition, use, or disposal. Management is responsible for maintaining effective internal control over financial reporting. Our responsibility is to express an opinion on management's assertion based on our examination.

Our examination was made in accordance with the attestation standards established by the American Institute of Certified Public Accountants; 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 considered NRC's internal control over financial reporting by obtaining an understanding of the agency's internal controls, determining whether these internal controls had been placed in operation, assessing control risk, and performing tests of controls and other procedures as we considered necessary in the circumstances. We believe that our examination provides a reasonable basis for our opinion. Our examination was of the internal control in place as of September 30, 2002.

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

In our opinion, management's assertion that NRC's accounting systems and the internal controls in place as of September 30, 2002, are in compliance with the internal control objectives defined in OMB Bulletin No. 01-02 is not fairly stated. Management did not identify managerial cost accounting as a material weakness.

Our consideration of management's assertion on internal control over financial reporting would not necessarily disclose all matters in the internal control over financial reporting that might be reportable conditions. Under standards issued by the American Institute of Certified Public Accountants, reportable conditions are matters coming to our attention relating to significant deficiencies in the design or operation of the internal controls that, in our judgment, could adversely affect the agency's ability to record, process, summarize, and report financial data consistent with the assertions made by management in the financial statements. Material weaknesses are reportable conditions in which the design or opera-

tion of one or more of the internal control components does not reduce to a relatively low level the risk that misstatements in amounts that would be material in relation to the 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 noted certain matters, discussed in the following paragraphs involving the internal control and its operation that we consider to be reportable conditions. Managerial Cost Accounting is considered a material weaknesses and a substantial non-compliance with the Federal Financial Management Improvement Act (FFMIA).

CURRENT YEAR COMMENTS

1. Managerial Cost Accounting

During fiscal year (FY) 1998, we identified the lack of compliance with the implementation of Statement of Federal Financial Accounting Standards (SFFAS) No. 4, Managerial Cost Accounting Concepts and Standards. At that time, the NRC's Chief Financial Officer (CFO) responded to the condition by developing a remediation plan to implement cost accounting. The plan contained milestones for developing a cost accounting system. The remediation plan strategy has changed to reflect tasks planned and accomplished. The most recent revision of the plan was issued May 31, 2001.

During FY 2002, the agency made progress by issuing preliminary reports to managers, and by initiating a dialogue with agency managers on the adequacy and usefulness of the reports provided. In May 2002, the CFO asserted completion of the remediation actions and implementation of a cost accounting system.

Although the agency has made progress, the cost accounting reporting system does not meet the requirements of SFFAS No. 4. Furthermore, the system does not contain fundamental management controls as required by the Joint Financial Management Improvement Program (JFMIP) guidelines (JFMIP includes the requirements of OMB Circulars A-123, A-127 and A-130) and GAO's Standards for Internal Control in the Federal Government.

SFFAS No. 4 Standards

The executive summary of SFFAS No. 4 discusses three key elements to assist Federal managers in implementing the standard and migrating to cost management. Those elements include:

- A discussion of the purposes of cost accounting. The purposes would generally drive the system's objectives and include using cost accounting for budgeting and cost control, performance measurement, setting fees, program evaluation, and making economic choice decisions.
- Five standards that form the framework against which the system should be measured to ensure that all aspects of the Federal Accounting Standards Advisory Board's (FASAB) guidance are considered and incorporated.
- Cost accounting concepts provided by FASAB to enable agencies to gain perspective on the relationships among cost, financial, and budgetary data.

Our assessment of the cost accounting reporting system focused on the adequacy of the reporting system in meeting the five SFFAS No. 4 standards. The table on the next page describes our assessment.

STANDARD (REFERENCES TO SFFAS NO. 4 IN ITALICS)	PRESENT SYSTEM DESIGN	CONCLUSION
Requirement for Cost Accounting: Agencies should accumulate and report the costs of their activities on a regular basis. The standard defines on a "regular basis" as continuously, routinely and consistently for management information purposes. (Paragraph 68)	Reports are accumulated and provided to managers. Reports were prepared for quarterly periods. FY 2002 was the first year of implementation.	The NRC determined that quarterly reports was an adequate reporting interval. Reports to managers were issued approximately 60 days after each quarter's end, thereby precluding managers from access to timely information for decision-making. Thus, the standard was not met.
Responsibility Segments: Managerial cost accounting should be performed to measure and report the costs of each segment's outputs. (Paragraphs 78 and 79)	Management defined responsibility segments as strategic arenas (SA). NRC defines outputs as planned accomplishments (PA). PAs range from activities such as managing diversity to license renewal inspections.	NRC's cost accounting was not designed to link responsibility segments to measurable costs of outputs. Full cost is accumulated at a SA rather than at the output (PA) level. Full cost accumulation for outputs (PAs) is not part of the current system's cost assignment design, thereby precluding compliance with the standard.
Full Cost: Reporting entities should report the full cost of outputs in general purpose financial reports. (Paragraph 89)	Management did not develop or report the full cost of outputs. NRC defines outputs as a PA, but accumulates full cost at the SA level.	The system was not designed to assign and distribute full costs to PAs (i.e., NRC outputs). Full cost assignment is performed at a higher level. Thus, the standard was not met.
Inter-Entity Costs: Each entity should incorporate the full cost of goods and services it receives from other entities. (Paragraphs 105 and 106)	The costs of programs operated jointly with others are tracked in the general ledger and not specifically in the cost accounting system.	The system does not address inter-entity costs. Presently, inter-entity costs are identifiable at the object class level in the general ledger's source journals. However, inter-entity costs are not a significant activity of the agency. Thus, assessment of this standard was not necessary.
Costing Methodology: The full cost of resources that directly or indirectly contribute to the production of outputs should be assigned through a cost assignment methodology. (Paragraphs 116, 117, and 120)	Management uses a hybrid activity based costing (ABC) approach, which includes allocations of support costs. Cost accumulations and assignments are performed for SAs.	The costing methodology used by the agency is a hybrid between cause and effect and ABC, which is acceptable. However, the assignment of full costs is not taken down to the output (i.e., PA) level. Thus, the system design does not accumulate costs of production of outputs, thereby precluding compliance with the standard.

The reporting system did not comply with requirements 1, 2, 3, and 5 of SFFAS No. 4.

In addition, we assessed the extent of the reporting system's compliance with JFMIP's requirements prescribed in Managerial Cost Accounting System Requirements, and the system's management controls as required by GAO's Standards for Internal Control in the Federal Government.

JFMIP Requirements

For FY 2002 the cost accounting reporting system does not fully meet JFMIP guidelines, specifically those related to information and functional requirements. For example, 1) the agency did not develop information system controls to minimize manual or ad hoc processes to gather and process files, and 2) the agency did not develop system security, backup or access controls.

The agency's internal system accreditation process, as performed by the Chief Information Officer (CIO), identified 11 "priority" areas associated with the system's information system requirements. Of the 11 issues raised, three were considered "high priority" since they directly impacted on business continuity, security/access controls and documentation and testing of the reporting system. Subsequent to year-end, the agency initiated a project to address the three high priority items. In addition, our review of system documentation and observations of the reporting system processing protocols disclosed that user manuals do not reflect the procedures used to collect and process information. As a result, the reporting system is not in compliance with the JFMIP and the related OMB financial system circulars previously cited.

GAO Standards for Internal Control in the Federal Government

Our assessment of the cost accounting system in place during the year also considered the design and implementation of sound management controls over the system. We noted that fundamental general and application controls over information processing (previously discussed), audit trails, segregation of duties, access restrictions, accuracy of system operating and user documentation were not in place. The lack of these elements of internal control precludes the agency from meeting the requirements of GAO's Standards for Internal Control in the Federal Government.

For example, the NRC's cost accounting reporting system does not have an audit trail to the Statement of Net Cost. As presently designed, the system collects information from the existing general ledger and Human Resources Management System (HRMS), where transactions are traceable to the agency's standard general ledger structure. Once the information is collected, the system performs the strategic arena allocations. Strategic arenas are the NRC's program categories used for preparing the Statement of Net Cost. Approximately 54.5% ($301 million) of the NRC's costs are subject to allocation.

As information moves through the system and is allocated to offices and strategic arenas, the system does not produce reports, matrices, or crosswalks to support the allocation process. There should be three steps in this process. First, there should be linkage to the legacy systems. Second, the system should produce reports, matrices, or crosswalks that show the cost allocation. Third, the system should provide

reports showing fully allocated costs to the strategic arena level. The system accomplishes the first and third steps; however, there is no second step (audit trail) to link the cost data to the final allocations in the third step.

GAO's Standards for Internal Control in the Federal Government, states, "Internal Control should provide reasonable assurance that the objectives of the agency are being achieved in the following categories...reliability of financial reporting, including reports on ...financial statements, and other reports for internal and external use." Thus, the lack of an audit trail causes undue risk to the agency in demonstrating the reliability of the Statement of Net Cost.

In summary, the agency has made great strides in cost reporting. However, the management control infrastructure necessary to ensure routine, reliable and consistent cost information, as required by accounting standards, JFMIP and OMB circulars was not in place. Despite the reporting system's deficiencies, we employed alternative audit procedures to verify the reasonableness of the allocations used to derive the Statement of Net Cost.

This issue results in a substantial non-compliance with the Federal Financial Management Improvement Act and a material weakness.

RECOMMENDATION

1. The CFO should develop a remediation plan to address design and infrastructure improvements needed for the cost accounting system. The CFO's plan should include the basic areas of emphasis which follow:

   - Compliance with the SFFAS No. 4 - each of the five standards should be reassessed separately from both an internal information needs perspective (i.e. special purpose reports to managers) and from a financial reporting perspective (i.e. financial discipline necessary for the preparation of the Statement of Net Cost). These two views may enable the CFO to improve compliance with the standard and demonstrate responsiveness to managers' decision-making needs and improve financial reporting.

   - JFMIP compliance - include an internal assessment of JFMIP compliance. This internal assessment should be performed by a team that was not directly involved in the design or development to provide the CFO an unbiased look at the system's compliance. The independent team might also be well served to have a person from OCIO to assess system limitations.

   - Internal Control - this area of emphasis should have a two-fold approach. First, the documentation related to operating and user manual should be updated, other members of the OCFO staff should be trained on the system's use to serve as backup for the existing personnel, and general and application controls should be revisited for completeness and operating efficiency. Second, electronic tools, databases, reports, etc., should be developed to provide an adequate audit trail to the Statement of Net Cost.

CFO's Comments

While the CFO agrees that more needs to be done to achieve compliance with SFFAS No. 4, he continues

to describe the efforts that have taken place to get the agency to this point. The CFO agrees in part with our comment and stated, "The OCFO will prepare a remediation plan describing improvements that will be made to the cost accounting system. In developing the plan, we will look at SFFAS No. 4, JFMIP and OMB financial system guidelines, and GAO internal control standards. The remediation plan will be completed by February 14, 2003."

Auditors' Position

We commend the CFO for proposing to develop remediation actions to address the weaknesses described in our comment regarding managerial cost accounting. The remediation plan should clearly and concisely address each remediation action to assure that the path taken by the CFO to achieve compliance with the standard, JFMIP system requirements, and internal control standards are fully considered and addressed. This condition is unresolved pending development of a remediation plan that meets federal accounting standards and systems requirements.

2. External Reporting

OMB Bulletin No. 01-09, Form and Content of Agency Financial Statements, requires the issuance of interim financial statements. Interim financial statements were required for the six-month period ended March 31, 2002. The bulletin requires the submission of a Balance Sheet, Statement of Net Cost and Statement of Budgetary Resources. The bulletin instructs reporting entities to ensure that information in the financial statements is prepared in accordance with Federal generally accepted accounting principles (GAAP) and the requirements of the Bulletin, and that the underlying records fully support the information. OMB's guidance also advises agency chief financial officers to develop agency policy guidance for the development of financial statements.

The NRC complied with the delivery of financial statements to OMB within the timeframe provided in the bulletin. Furthermore, the agency prepared a more complete financial statement package than required by adding the notes to the financial statements. However, the agency did not have a CFO and CIO accredited or approved financial system to support the interim Statement of Net Cost; the agency developed the interim financial statements using cost accounting data from a developmental, non-production database. This approach to reporting does not meet the OMB's requirements. Interim operational approval of the system was provided by the CFO and CIO on September 27, 2002.

Our assessment of the reliability of the cost accounting data used prior to year-end noted the following flaws impacting the reliability of the Statement of Net Cost issued for March 31, 2002:

- Data validation procedures for system output reports were not fully developed until June 2002.

- Data testing to determine whether system data was valid and reliable was not initiated until mid-July 2002.

In addition to the conditions previously discussed, the general controls over the system were not adequate for the fiscal year. The interim operational approval of the system identified "high" priorities

impacting data integrity and reliability. Subsequent to year-end, the agency began addressing the conditions identified by the OCIO during the system accreditation process.

RECOMMENDATION

2. The CFO should ensure that external reports of the agency are prepared only from operational and accredited systems and supported by complete financial records.

CFO's Comment

Agree. The OCFO completed corrective actions on the three high-priority issues and received the Chief Information Officer's final certification to operate the cost accounting system on November 12, 2002. A documented audit trail for cost accounting system reports will be completed by February 14, 2003.

Auditors' Position

Although the CFO agrees with the comment made, there was no discussion of new or proposed policies or procedures that will be placed into operation to preclude relying on pre-operational applications. We commend the CFO for continuing to pursue development of an audit trail by mid-February 2003. This condition is unresolved.

3. Internal Use Software Monitoring

In 1998, FASAB issued SFFAS No. 10, Accounting for Internal Use Software, effective October 1, 2000. The agency developed internal guidance to implement the standard on time. NRC also developed training for agency personnel to ensure that agency personnel fully understood the policy.

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.

NRC's Internal Use Software Capitalization Policy, dated September 18, 2000, defines capitalized software costs to include "NRC staff salary and benefit (S&B) costs of direct time spent during the development phase dedicated to managing the specific project, designing software configurations and interfaces, coding, installing on hardware, and testing/debugging."

Our assessment included each project that was in the developmental phase during FY 2002. Although one project entered the development phase during FY 2002, the agency did not capitalize the associated employee costs. We also noted that OCFO did not have proactive monitoring procedures to identify projects that began or completed the development phase. The GAO's 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."

According to OCFO policy, before a project can advance from the preliminary design phase to the development phase, OCIO must approve the project. Typically, OCIO sends a memo to the project man-

ager advising that the proposed investment has been approved and the project can move into the development phase. Under NRC policies, it is then the responsibility of the individual offices to (1) inform OCFO that they are going to begin a software development project, and (2) request a labor code for tracking employee hours. The referenced project was approved to move into the development phase on August 9, 2001, and a labor code was created to track employee hours.

Subsequently, the project manager began development activities in February 2002, and other agency personnel began development activities in early July 2002. We began our review in late July 2002, and noted that employees were not charging time to the assigned labor code because the project manager did not believe the activities qualified as development. Our assessment indicates that the activities and associated hours should have been captured and capitalized.

Under the present management control structure, the OCFO relies primarily on project managers to inform them of time and costs expended in the software development phase. OCFO does not have sufficient proactive monitoring procedures in place to ensure the completeness or reasonableness of the information provided.

RECOMMENDATION

3. The CFO should implement policy and procedures to independently determine project status for software capitalization purposes. Use of a project tracking mechanism or regular access to project status reports would enhance the awareness of projects and enable the OCFO to improve monitoring activities. This process would enable OCFO to compare those activities to the time and cost being capitalized in the agency's records.

CFO's Comments

Agree. The OCFO will modify its current procedures for monitoring approved software development projects to ensure a more proactive approach is used to monitor project status. Revised procedures will be completed by February 28, 2003.

Auditors' Position

The CFO proposal to modify its policies and procedures resolves this comment. Closure is dependent on the development and issuance of policy enhancements.

STATUS OF PRIOR YEARS' COMMENTS

1. Management Controls Over Small Entity Certifications

As reported in prior years, NRC did not have a validation process to ensure that materials licensees that claimed small entity status actually qualified for such status. Licensees that qualify as small entities pay reduced annual fees depending on their size (10 CFR 171.16). Businesses, nonprofit agencies, educational institutions or local governments may qualify as small entities depending on either average annual gross receipts, number of employees or population jurisdiction. Licensees qualify for reduced fees by completing and submitting a Certification of Small Entity Status For The Purposes of Annual Fees Imposed Under 10 CFR Part 171 (NRC Form 526) with the applicable fee.

The CFO responded in prior years that they planned to explore the recommendations provided and that they would advise us of their results. On December 7, 2001, the agency issued a memorandum documenting an approach that would be used for FY 2002. The approach and the practices instituted are acceptable; thus, this condition is closed.

2. Accounting for Internal Use Software

In the prior year, we reported that the NRC did not have the management controls in place to demonstrate that it had satisfactorily implemented SFFAS No. 10, Accounting for Internal Use Software.

The CFO responded that the issues related to this condition would be remedied by implementing a new Human Resources Management System in early FY 2002. We reviewed the controls implemented as a component of the new system and have concluded that the specific issues raised in the prior year have been adequately addressed. Therefore, this condition is closed.

3. Contract Close-out Processing Procedures

In the prior year, we reported that the Division of Contracts and Property Management (DCPM) performs a review of contracts in close-out and determines the amounts that should remain available for future payments and also the amounts that should be deobligated. This process is normally followed to determine the continued viability of recorded undelivered orders. We found that DCPM notified OCFO's General Accounting Branch (GAB) of amounts to be expensed. GAB then recognized the expenses without supporting documents such as contractor invoices, receiving reports or project manager certifications that the services had been performed.

In his response, the CFO indicated that GAB would ensure that all expenses recorded for contracts in closeout are supported by adequate documentation. Our follow-up review of this process indicates that GAB has not instituted a process to ensure that amounts are correctly reflected in the agency's records. This condition will be closed when the agency demonstrates that it has reviewed and corrected, as necessary, all expenses recorded for contracts in close-out.

Assurance on Performance Measures

With respect to internal controls related to performance measures, the OIG performed those procedures and will report on 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.

This report is intended solely for the information and use of the Commissioners and management of the U.S. Nuclear Regulatory Commission, OMB, Congress and the NRC Office of the Inspector General and is not intended to be and should not be used by anyone other than these specified parties.

December 13, 2002

R. Nowano & Associates, Inc.

R. NAVARRO & ASSOCIATES, INC.
CERTIFIED PUBLIC ACCOUNTANTS

INDEPENDENT AUDITORS' REPORT ON COMPLIANCE WITH LAWS AND REGULATIONS

Chairman Richard A. Meserve
U.S. Nuclear Regulatory Commission
Rockville, Maryland

We have audited the principal statements of the U.S. Nuclear Regulatory Commission (NRC) as of and for the years ended September 30, 2002 and 2001, and have issued our report thereon dated December 13, 2002. We conducted our audit 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 Office of Management and Budget (OMB) Bulletin No. 01-02, Audit Requirements for Federal Financial Statements.

The management of the U. S. Nuclear Regulatory Commission 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 laws and 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 of the Federal Financial Management Improvement Act (FFMIA) of 1996. Our objective was not to issue an opinion on compliance with laws and regulations and, accordingly, we do not express such an opinion.

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 $54.4 and $46.6 million, respectively for the years ended September 30, 2002 and 2001, 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 General Accounting 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.

The results of our tests of compliance with the laws and regulations described in the preceding paragraphs exclusive of FFMIA, disclosed continuing instances of noncompliance with the following laws and regulations that are required to be reported under Government Auditing Standards and OMB Bulletin No. 01-02.

PRIOR-YEAR COMMENTS

1. Compliance with Computer Software Accountability

A review was performed by the OIG (Report No.

OIG-02-A-02) of the NRC's management controls governing the accountability and control of software and software licensing agreements. Follow-up and resolution actions on this issue will be tracked by OIG and reported under separate cover.

2. Part 170 Hourly Rates

As previously reported in fiscal years (FY) 1998 through 2001, the Omnibus Budget Reconciliation Act (OBRA) of 1990 requires the NRC to recover approximately 100% of its budget authority by assessing fees. (The recovery percentage has been reduced in recent years by 2 percent each year. During FY 2002, the recovery percentage was 96 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 (IOAA) of 1952, is assessed for specific licensing actions, inspections and other services provided to NRC's licensees and applicants.

Each year, the Office of the Chief Financial Officer (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. The FY 1998 rates were not developed in accordance with applicable laws and regulations because they were not based on the full cost of providing Part 170 services.

The CFO has been awaiting the implementation of cost accounting to fully address this condition. During FY 2002, we performed a preliminary assessment of the OCFO's use of cost accounting information as a means to review the hourly rate calculation methodology. The OCFO stated in a memorandum dated September 30, 2002, that "?in order to use cost accounting data as input to our review, we compared components of the budget included in the hourly rate to the cost accounting data."

Our assessment indicates that the OCFO has made progress by acknowledging the need to make such a comparison. However, the agency needs to refine its approach in order to substantiate the reasonableness of rates developed on a budgetary basis. The following observations were made during our assessment:

- The methodology used to derive the cost-based number did not follow the existing methodology used to build the agency's published fee rates. The agency's normal fee rate methodology derives separate rates for reactors and materials. However, OCFO's comparison used a composite hourly rate. Such a calculation precludes comparing the individual rates.

- The cost-based rate did not use the same identifiable costs elements as those used in the budget-based model. The agency made adjustments to cost-based data for administration, FOIA, and absences using budget estimates rather than using actual cost data. Commingling cost and budgetary elements will not produce results that can be reasonably used as a basis for comparison.

We encourage the agency to reassess the approach used in the analysis provided for review and to refine the process and the cost elements to a level that will

achieve comparability. Until an analysis is completed, documented and available for additional audit follow-up, the recommendation related to this condition cannot be closed.

FFMIA - STATUS OF PRIOR YEAR COMMENTS

Under FFMIA, we are required to report whether the agency's financial management systems substantially comply with the Federal financial management systems requirements, Federal accounting standards, and the United States Government Standard General Ledger at the transaction level. To meet this requirement, we performed tests of compliance using the implementation guidance for FFMIA included in Appendix D of OMB Bulletin No. 01-02. The results of our tests provided us the basis to update the status of prior year instances of noncompliance.

1. Managerial Cost Accounting

In FY 1998, we reported the agency's lack of implementation of Managerial Cost Accounting as both a material weakness and FFMIA substantial non-compliance. In July 1999, the agency developed a remediation plan, thereby resolving the comment. In the current year, the CFO asserted that the remediation plan had been met and therefore the agency was in compliance with SFFAS No. 4. This action closes the FY 1998 comment.

Refer to the Report on Management's Assertion About the Effectiveness of Internal Control, Current Year Comment A - Managerial Cost Accounting, for a detailed discussion of the condition regarding our assessment of the NRC's new system. The system placed into operation during FY 2002 resulted in a material weakness and a Federal Financial Management Improvement Act substantial non-compliance.

2. Business Continuity

In prior years, we reported conditions resulting from our assessment of NRC's management control program relating to the agency's business continuity practices for major financial management systems. At the end of FY 2001, the issue identified with the core general ledger - Federal Financial System (FFS) operated by Treasury's Financial Management Service (FMS) remained an unresolved condition.

In the current year, NRC changed service providers to the Department of Interior's National Business Center. Therefore, the condition addressing FMS is no longer applicable and is closed.

Consistency of Other Information

NRC's overview of program performance goals and results, and other supplemental financial and management information contains a wide range of data, some of which is not directly related to the principal statements. We do not express an opinion on this information. We have, however, compared this information for consistency with the principal statements and discussed the measurement and presentation methods with NRC management. Based on this limited effort, we found no material inconsistencies with the principal statements or noncompliance with OMB guidance.

Objectives, Scope and Methodology

NRC management is responsible for (1) preparing the principal statements in conformity with the basis

of accounting described in Note 1 of the Notes to Principal Statements, (2) establishing, maintaining, and assessing internal controls to provide reasonable assurance that FMFIA's broad control objectives are met, and (3) complying with applicable laws and regulations, including the requirements referred to in FFMIA.

We are responsible for (1) expressing an opinion on whether the principal statements are free of material misstatement and presented fairly, in all material respects, in conformity with generally accepted accounting principles, and (2) obtaining reasonable assurance about whether management's assertion about the effectiveness of internal control is fairly stated, in all material respects, based upon criteria established by FMFIA and OMB Circular A-123, Management Accountability and Control. As of the date of our report, NRC management had completed its evaluation of financial management controls.

We are also responsible for testing compliance with selected provisions of laws and regulations, and for performing limited procedures with respect to certain other information in the principal statements. In order to fulfill these responsibilities, we:

- examined, on a test basis, evidence supporting the amounts and disclosures made in the principal statements;
- assessed the accounting principles used and significant estimates made by management;
- evaluated the overall presentation of the principal statements;
- obtained an understanding of internal controls related to safeguarding of assets, compliance with laws and regulations, including execution of transactions in accordance with budget authority and financial reporting in the principal statements;
- assessed control risk and tested relevant internal controls over safeguarding of assets, compliance, and financial reporting, and evaluated management's assertion about the effectiveness of internal control;
- tested compliance with selected provisions of the following laws and regulations: Anti-Deficiency Act (Title 31 U.S.C.), National Defense Appropriation Act (PL 101-510), Omnibus Budget Reconciliation Act of 1990 (PL 101-508), Debt Collection Act of 1982 (PL 97-365), Prompt Pay Act (PL 97-177), Civil Service Retirement Act of 1930, Civil Service Reform Act (PL 97-454), Federal Managers' Financial Integrity Act (PL 97-255), Chief Financial Officers Act (PL 101-576), Budget and Accounting Act of 1950, Federal Financial Management Improvement Act (PL 104-208), and the Government Information Security Reform Act.
- reviewed compliance and reported in accordance with FFMIA whether the agency's financial management systems substantially comply with the Federal financial management system requirements, applicable accounting standards and the U.S. Standard General Ledger at the transaction level.

We did not evaluate all internal controls relevant to operating objectives as broadly as defined in FMFIA, such as those controls for preparing statistical reports and those for ensuring efficient and effective operations. We limited our internal control tests to those controls necessary to achieve the objectives described in our opinion on management's assertion about the effectiveness of internal controls. We performed our work in accordance with auditing standards generally accepted in the United States of America, the standards applicable to financial audits contained in Government Auditing Standards and OMB Bulletin No. 01-02, *Audit Requirements for Federal Financial Statements*.

This report is intended solely for the information and use of the Commissioners and management of the U.S. Nuclear Regulatory Commission, OMB, Congress and the NRC Office of the Inspector General and is not intended to be and should not be used by anyone other than these specified parties.

December 13, 2002

R. Navarro & Associates, Inc.

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

CHIEF FINANCIAL OFFICER

December 24, 2002

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

FROM: Jesse L. Funches
Chief Financial Officer

SUBJECT: DRAFT AUDIT REPORT - AUDIT OF THE NUCLEAR REGULATORY COMMISSION'S FY 2002 FINANCIAL STATEMENTS

I have reviewed the draft audit report of the Nuclear Regulatory Commission's FY 2002 Financial Statements, dated December 19, 2002. While I mostly agree with the audit report recommendations, I disagree with the report's conclusion regarding managerial cost accounting. While additional work is needed in cost accounting, it is important to recognize our progress made over the past year to implement a cost accounting program in the agency. My office has aggressively pursued appropriate business solutions for meeting cost accounting requirements associated with financial systems, fulfilling our reporting responsibilities, and meeting accounting standards.

During FY 2002, a cost accounting system was implemented using commercial off-the-shelf software. The system was used to provide agency managers with quarterly internal cost reports as additional input to their decision making activities. The system was also used to support the preparation of the Statement of Net Cost. Lastly, consistent with the flexibility built into SFFAS No.4, *Managerial Cost Accounting Standards*, I believe we have met the intent of the standards and will continue to refine our use of cost accounting in the NRC.

Our responses to the three recommendations follows.

Recommendation 1

The CFO should develop a remediation plan to address design and infrastructure improvements needed for the cost accounting system. The CFO's plan should include the basic areas of emphasis which follow:

- Compliance with the SFFAS No. 4 - each of the five standards should be reassessed separately from both an internal information needs (i.e. special purpose reports to managers) perspective and from a financial reporting (i.e. financial discipline necessary for the preparation of the Statement of Net Cost) perspective. These two views may enable the CFO to improve compliance with the standard and demonstrate responsiveness to managers' decision-making needs and to financial reporting.

- JFMIP compliance - include an internal assessment of JFMIP compliance. This internal assessment should be performed by a team that was not directly involved in the design or development to provide the CFO an unbiased look at the system's compliance. The independent team might also be well served to have a person from OCIO to assess system limitations.

- Internal Control - this area of emphasis should have a two-fold approach. First, the documentation related to operating and user manual should be updated, other members of the OCFO staff should be trained on the system' s use to serve as backup for the existing personnel, and general and application controls should be revisited for completeness and operating efficiency. Second, electronic tools, databases, reports, etc., should be developed to provide an adequate audit trail to the Statement of Net Cost.

Response

Agree in Part. The OCFO will prepare a remediation plan describing improvements that will be made to the cost accounting system. In developing the plan, we will look at SFFAS No. 4, JFMIP and OMB financial system guidelines, and GAO internal control standards. The remediation plan will be completed by February 14, 2003.

Recommendation 2

The CFO should ensure that external reports of the agency are prepared only from operational and accredited systems and supported by complete financial records.

Response

Agree. The OCFO completed corrective actions on the three high-priority issues and received the Chief Information Officer's final certification to operate the cost accounting system on November 12, 2002. A documented audit trail for cost accounting system reports will be completed by February 14, 2003.

Recommendation 3

The CFO should implement policy and procedures to independently determine project status for software capitalization purposes. Use of a project tracking mechanism or regular access to project status reports would enhance the awareness of projects and enable OCFO to improve monitoring activities. Once the project activities underway are known it would enable OCFO to compare those activities to the time and cost being capitalized in the agency's records.

Response

Agree. The OCFO will modify its current procedures for monitoring approved software development projects to ensure a more proactive approach is used to monitor project status. Revised procedures will be completed by February 28, 2003.

cc: J. Craig, AO/OEDO

Contact: Barbara K. Gusack, OCFO/GAB
415-6054

➤ Nuclear power reactor cooling tower and power transmission lines

APPENDIX A:
MANAGEMENT CHALLENGES

November 18, 2002

MEMORANDUM TO: Chairman Meserve

FROM: Hubert T. Bell
Inspector General

SUBJECT: INSPECTOR GENERAL'S ASSESSMENT OF THE MOST SERIOUS MANAGEMENT CHALLENGES FACING NRC (OIG-03-A-02)

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 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 accordance with the Reports Consolidation Act of 2000, I am submitting my annual assessment of the major management challenges confronting the U.S. Nuclear Regulatory Commission (NRC).

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

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

APPENDIX A: INSPECTOR GENERAL'S ASSESSMENT

The most serious management challenges facing NRC may be, but are not necessarily, areas that are problematic for the agency. The challenges, as identified, represent critical areas or difficult tasks that warrant high-level management attention. This year, I identified nine management challenges I consider to be the most serious.

DISCUSSION

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

CHALLENGE 1

Protection of nuclear material and facilities used for civilian purposes.

NRC's, and the industry's, highest priority must be the protection of public health and safety. In light of the events of September 11, 2001, the NRC has recognized the need to reexamine past security strategies to ensure that the right protections are in place for the long term. One action that NRC has taken following the terrorist attacks included enhanced access control at nuclear power plants. In the Chairman's opinion, this enhancement may be one of the most effective means of preventing a successful attack, because an insider could provide significant assistance to an attacking force. The agency has also completed an initial assessment of power reactor vulnerabilities to the intentional malevolent use of commercial aircraft in suicidal attacks, as well as initiating a broad-ranging research program to understand the vulnerabilities of various classes of facilities to a wide spectrum of attacks.

NRC's security program contains many facets to protect against the design basis threat. The design basis threat defines the threat against which power plants and selected fuel cycle facilities must be capable of defending. The National Journal gave nuclear power plants a grade of B-. It stated that Congressional critics found problems with the design basis threat, stating that the attacks on plants were too specific and only covered attacks by small groups of potential terrorists. In addition, on September 12, 2002, the Project on Government Oversight issued a report on nuclear power plant security stating that the NRC has done little to effectively improve security at nuclear power plants since September 11, 2001. It asserted that, most significantly, the NRC has not toughened the design basis threat security regulations, which specify the number of outside attackers and inside co-conspirators that nuclear facilities must be prepared to defeat.

NRC has developed a new Threat Advisory and Protective Measures System in response to Homeland Security Presidential Directive-3. When a new Homeland Security Advisory System threat condition is declared, NRC will promptly notify affected licensees of the condition and refer them to the predefined protective measures that NRC developed for each threat level. The new system for NRC licensees was formally communicated on August 19, 2002.

In response to the attacks on September 11, 2001, NRC established the Office of Nuclear Security and Incident Response on April 7, 2002. The office was intended to consolidate security, safeguards, and emergency response into one area. The objectives of this new office are to: (1) improve communications and coordination within the agency and with exter-

nal entities, including Federal and State agencies; (2) streamline communications; (3) improve the timeliness and consistency of information; and (4) provide a more visible point of contact and effective counterpart to the Office of Homeland Security, as well as other Federal agencies.

RELATED OFFICE OF THE INSPECTOR GENERAL WORK

Investigations

- Review of NRC's Staff Approval of the Carolina Power and Light Request for Expansion of High-Level Radioactive Waste Storage
- NRC's Regulatory Oversight Over the Control of Special Nuclear Material at Millstone Unit 1

CHALLENGE 2

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

NRC faces numerous challenges in implementing a risk-informed approach for nuclear power plants as well as for nuclear material licensees. The NRC developed the Reactor Oversight Process to move toward a more-risk informed regulatory philosophy. The processes included developing and implementing a risk-informed inspection program to provide increased focus on aspects of plant performance, which has the greatest impact on safe plant operation. The Reactor Oversight Process focuses on seven specific cornerstones: initiating events; mitigating systems; barrier integrity; emergency preparedness; public radiation safety; occupational radiation safety; and physical protection. The premise is that safety is maintained if the licensee performs acceptably in these cornerstones.

The agency is studying other performance indicators to see if it can establish an even better connection to risk. NRC is also seeking performance indicators that will help predict emergent problems, and thereby permit their avoidance, rather than to apply performance indicators that merely confirm existing problems.

According to the Chairman, overall, the oversight process has continued to meet its goals of providing more objective and understandable assessments of plant performance while focusing on aspects of the operation that are the most safety-significant. However, he acknowledged that improvements can be made in the way NRC assesses performance indicators and in the indicators themselves. There is also a need to improve the risk-assessment tools and techniques that are employed in the significance determination process. He also expressed that the accomplishments to date represent only a few baby steps, but NRC is committed to pursue risk-informing regulation initiatives over the long term. Risk-informed regulation will be a major area of focus for NRC over a number of years.

NRC's most significant initiative is still unfolding—to risk-inform the so-called "special treatment" requirements for nuclear plant systems, structures and components. Special treatment refers to the regulatory requirements in such areas as technical specifications, quality assurance, and environmental qualification requirements. The outcome of this effort is expected to be a fundamental change in the criteria used to determine when special treatment requirements should be imposed.

RELATED OFFICE OF THE INSPECTOR GENERAL WORK

Audits

- Audit of NRC Oversight of its Federally Funded Research and Development Center
- Review of NRC's Significance Determination Process

Investigations

- Review of NRC's Staff Approval of the Carolina Power and Light Request for Expansion of High-Level Radioactive Waste Storage

CHALLENGE 3

Acquisition and implementation of information resources.

Federal agencies' acquisition and implementation of information resources are crucial in (1) supporting critical mission-related operations, and (2) providing more effective and cost-efficient government services to the public. NRC, like other Federal agencies, continues to struggle in its efforts to obtain a good return on these investments. In recent years NRC has created massive databases of publicly-available information including the Agencywide Documents Access and Management System (ADAMS), the Electronic Information Exchange and the NRC website. ADAMS is the agency's electronic recordkeeping system that maintains the official records of the agency. The system continues to pose concerns for NRC. To remedy some of the deficiencies, NRC has planned updates for ADAMS, which will include upgrades to both agency workstations and server software, and includes full text search capability on the main library and a new web-based search software to access public documents.

The Office of Management and Budget (OMB) cited NRC in its annual report to Congress as one of a few agencies that had no violations of the Paperwork Reduction Act and had achieved burden reductions at a time when most agencies increased their burden to the public. In addition, NRC outlined its e-government and Government Paperwork Elimination Act strategy in a report to OMB last October. The strategy included the:

- implementation of all of the electronic transactions reported under the Government Paperwork Elimination Act,
- extending the digital signature capability,
- moving to electronic document management from creation to retirement,
- moving to a single, fully integrated human resources information management system, and
- leveraging the web for external and internal communications.

As a key component of its electronic government activities, NRC officials stated that the agency launched the Electronic Information Exchange production system and is developing an Electronic Information Exchange rule that will allow NRC licensees and others to electronically submit almost all documents and data via this exchange system as well as by CD-ROM, E-mail, and fax.

During fiscal year 2001, NRC made significant progress in redesigning NRC's public website with substantial guidance and assistance from a web redesign steering committee chartered by the

Executive Director for Operations and the Chief Information Officer.

While the agency has made strides in implementing information resources, additional improvements are needed.

RELATED OFFICE OF THE INSPECTOR GENERAL WORK

Audits

- Use of the Internet at NRC
- Review of NRC's Accountability and Control of Software
- Review of ADAMS
- Review of NRC's Protection of Social Security Numbers
- Independent Evaluation of NRC's Information Security Program as Required by the Government Information Security Reform Act for Fiscal Year 2002

Investigations

- Misuse of NRC Computer to Access Pornographic Material

CHALLENGE 4

Administration of all aspects of financial management.

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 financial information to support agency management; an effective cost-accounting system; well-developed strategic planning; and an integrated method for planning, budgeting, and assessing performance to better enable NRC to align programs with outcomes. Sound financial management also includes the manner in which an agency procures products and services. Procurements must be made in accordance with Federal guidance and with an aim to achieve the best value for the agency's dollars. Without effective management controls, the procurement process is susceptible to fraud, waste, and abuse.

NRC received an unqualified opinion on its financial statements for the eighth consecutive year during fiscal year 2001. Although NRC closed out four reportable conditions from the fiscal year 2000 financial statement audit, the agency had two new reportable conditions. One of the new reportable conditions, which also is a material weakness, is related to implementing the accounting policies for the agency's software capitalization policy. While progress has been made to tighten controls over financial management processes, further improvements are needed.

During the first quarter of fiscal year 2002, NRC implemented the human resources, payroll, and time and labor modules of the Human Resources Management System. However, NRC has yet to achieve its vision for a fully integrated, agency-wide financial management system.

RELATED OFFICE OF THE INSPECTOR GENERAL WORK

Audits

- Audit of AID-Funded Activities
- Audit of Unbilled Costs by an NRC Contractor
- Review of Materials Licensee Fees
- Independent Auditors' Report and Principal Statements for the Years Ended September 30, 2001 and 2000
- Review of NRC's Implementation of the Federal Managers' Financial Integrity Act for Fiscal Year 2001
- Review of NRC's Simplified Acquisition Procedures
- Audit of NRC Oversight of Its Federally Funded Research and Development Center

Investigations

- NRC Employee Use of NRC Pager for Personal Business
- False Claims by NRC Materials Licensee
- Theft by NRC Contractor

CHALLENGE 5

Clear and balanced communication with external stakeholders.

To maintain public trust and confidence, NRC must be viewed as an independent, open, efficient, clear, and reliable regulator. To this end, the agency should provide its diverse group of external stakeholders (e.g., the Congress, general public, other Federal agencies, industry, and citizen groups) with clear, accurate, and timely information about, and a meaningful role in, NRC's regulatory process. This is a challenging task because of the highly technical nature of NRC's operations, the sensitivity of its information, and the balance the agency must maintain to remain independent.

NRC has made improvements in the quality, clarity, and credibility of its communications with all stakeholders. The agency's initiatives include the development of: (1) communication plans to improve interactions with internal and external stakeholders on important projects and events; (2) a redesigned website to provide a richer variety of information; (3) formal training courses to provide NRC staff with the necessary skills; and (4) newsletters for highly visible topics.

Another important initiative that the agency has underway is to enhance public participation through the three types of NRC meetings open to the public. Category 1 meetings invite the public to observe the business portion of the meeting. It then gives the public an opportunity to communicate with the NRC after the business portion of the meeting, but before the meeting is adjourned. Category 2 and Category 3 meetings afford the public more opportunities to ask questions and provide comments at the meeting. NRC officials created a page on the external website which provides information such as explaining the three different categories, as well as feedback forms.

Public confidence is an NRC strategic goal. However, the agency has no baseline upon which to measure how well it delivers the value intended. The challenge for NRC is to afford all stakeholders, including the public, with appropriate and meaningful access to its

regulatory process. This access must be provided in a committed, stipulated, consistent, timely, and unambiguous manner that fosters confidence in the agency. At the same time, the agency is also faced with the responsibility of protecting sensitive security and safeguards information from unauthorized access.

No matter how much the NRC staff knows and how much it learns, there is still the possibility—in fact, the likelihood—that unanticipated events will occur. A recent example is the corrosion of the reactor vessel head at Davis-Besse. When these types of events arise, the sharing of pertinent information among NRC, licensees, and the public is indispensable in helping to determine what happened, whether other plants may be similarly vulnerable, and how to prevent such problems from arising in the future.

RELATED OFFICE OF THE INSPECTOR GENERAL WORK

Audits

- Audit of AID-Funded Activities
- Review of Materials Licensee Fees
- Review of ADAMS
- Review of NRC's Significance Determination Process

Investigations

- Improper Release of Proprietary Financial Information
- Review of NRC's Staff Approval of the Carolina Power and Light Request for Expansion of High-Level Radioactive Waste Storage

CHALLENGE 6

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

Internal communication is a fundamental and necessary aspect of conducting agency business. NRC needs effective internal communication channels and methods to support its critical health and safety mission. Information is the key resource that links managers with staff, the organization, and other internal stakeholders—enabling people to do their jobs and to work cooperatively and efficiently in a coordinated manner. However, unless the information is organized in a useful manner, it is merely data and not meaningful.

NRC has undertaken actions to improve its internal communications over the past year. Actions taken include (1) the continuing use of the electronic "EDO Updates," a new type of communication between the Executive Director for Operations and the entire staff; (2) a new link on the internal Web, which includes step-by-step instructions for how to create communication plans and instructions on conducting public meetings, and (3) a communications bulletin for managers and supervisors that is issued twice a month to help managers communicate better both within and between departments.

RELATED OFFICE OF THE INSPECTOR GENERAL WORK

Audits

- Use of the Internet at NRC
- Review of the Materials Licensee Fees
- Review of ADAMS

- Review of NRC's Significance Determination Process

Investigations

- Improper Release of Proprietary Financial Information

CHALLENGE 7

Integration of regulatory processes in a changing external environment.

NRC faces a number of challenges related to the changing regulatory and business environment. For example, an NRC working group identified and assessed the possible effects of nuclear industry consolidation on NRC's oversight functions and responsibilities. The group concluded that the existing NRC organizational structure, policies, guidance, and regulations are adequate at this time. However, staff continues to monitor experience and feedback from the current oversight processes and will consider further study should significant changes occur in the industry. NRC also faces such challenges in the following areas.

High-level Waste

Several Federal agencies have a role in the disposal of spent nuclear fuel and other high-level radioactive waste under the Nuclear Waste Policy Act of 1982. NRC expects to receive an application in the next few years from the Department of Energy for a permit to construct a permanent repository for high-level waste at Yucca Mountain. NRC anticipates that if an application to build the repository is submitted, the administrative proceeding will be massive—perhaps as vast and complex as any the Federal Government has ever seen. The significant challenge for NRC is ensuring that all parties and decision makers have timely access to filings and exhibits.

Reactor License Renewal

Many electric generating companies have sought, and others are expected to follow suit, to renew the licenses of their facilities rather than decommissioning the plants. NRC staff has met or bettered the target schedules for the four license renewal reviews completed to date while maintaining the necessary technical rigor. In addition, renewal applications for eight plants are currently under review and four more applications are expected before the end of the current fiscal year. This workload will continue to challenge the agency to complete the review in a timely manner.

Applications to Increase Power Output

NRC expects to receive a number of applications to increase approved reactor power output in the near future. As a result, NRC is looking at ways to improve the efficiency of the process, while maintaining the high technical quality of its reviews. NRC has been significantly challenged over the last few years with the increasing number of new requests and with many licensees requesting larger power increases.

RELATED OFFICE OF THE INSPECTOR GENERAL WORK

Audits

- Audit of AID-Funded Activities
- Audit of NRC Oversight of Its Federally Funded Research and Development Center
- Review of NRC's Significance Determination Process

CHALLENGE 8

Maintenance of a highly competent staff (i.e., human capital management).

NRC needs a dynamic, diverse workforce with the appropriate knowledge, skills, and abilities to achieve its public health and safety mission. Human capital management—a process for identifying the human capital required to meet organizational goals and developing the strategies to meet these requirements—provides managers with a framework for making sound staffing decisions. The Chairman recognizes this challenge and stated that "We need to focus attention on assuring the appropriate skill mix for the NRC."

In fiscal year 2001, the OIG released a report on NRC's workforce planning. NRC is making a concerted effort to strengthen the agency's approach to workforce planning; however, the agency lacked a comprehensive, agencywide workforce plan. NRC has made an effort to respond to this challenge over the past year. NRC is undertaking a significant effort to develop administrative processes and to standardize its strategic workforce planning initiative. Actions include developing and implementing a Strategic Workforce Planning Communication Plan and integrating strategic workforce planning into the Planning, Budgeting, and Performance Management process for the fiscal year 2004 budget. Strategic workforce planning needs will be identified by the offices and strategies to address these needs will be developed. Also by fiscal year 2004, NRC plans to have a fully integrated process and an automated skills database to support human capital management throughout the agency.

The agency recognizes that the nuclear industry is rapidly changing. There are new technologies and new ways for the staff to learn new skills to do their day-to-day business. NRC, like many other Federal agencies, is facing the likelihood of increased retirements and the resulting loss of important knowledge and expertise. The agency needs to meet this challenge in order to address all other management challenges. Continued efforts are needed to ensure that the agency's workforce planning efforts become institutionalized and continue to get the high level attention they have received over the past year.

RELATED OFFICE OF THE INSPECTOR GENERAL WORK

Audits

- Review of NRC's Use of Credit Hours

Investigations

- Staff Bias in Connection with NRC Workforce Planning Contract

CHALLENGE 9

Protection of information.

This is a new standalone management challenge for the agency. After September 11, 2001, concerns that information in NRC databases could be used for malicious purposes, caused NRC to take several steps. NRC denied access to certain documents normally publicly available and NRC changed its interactions with the public to ensure that sensitive information was not being disclosed. These steps were taken because of the view that information contained in the databases may be of interest to those with malicious intentions and potentially significant harm could result from inappropriate disclosure.

Actions taken included adding additional barriers and warning messages to the ADAMS software to prevent the release of sensitive documents or packages. In addition to protecting information in ADAMS, a sensitivity warning message is shown at the bottom of every page on the agency's internal Web site to serve as a reminder that sensitive information should not be made publicly available. This message is consistent with the current agency-approved guidance regarding the release of information to the public, and is especially important given recent developments, which have heightened NRC's safeguards and security awareness.

NRC has made efforts to strengthen information protection. Nevertheless, recent audits continue to show weaknesses that place critical operations at risk of fraud, misuse, and disruption. In October 2002, OIG released a report on NRC's handling and marking of sensitive unclassified information and found that the current guidance does not provide adequate controls to protect information from inadvertent public disclosure. Specifically, protective measures were left to the discretion of the document originator.

Additionally, in the past two years, OIG has evaluated the agency's information security program and practices. OIG assessed compliance with requirements and related information security policies, procedures, standards, and guidelines. During the fiscal year 2002 Government Information Security Reform Act evaluation, OIG found that NRC has made substantial progress in improving its information security program. Despite this progress, the security program is not well integrated and is not consistently implemented across the agency. NRC officials have not clearly defined the responsibility and accountability for all aspects of the information security program within its organizational structure.

A recent audit disclosed a lack of full adherence to agency policy covering the use of social security numbers. In addition, the agency's practices of its Freedom of Information Act and Privacy Act responsibilities have been inconsistent, resulting in both the inadvertent release of information and inadequate document searches.

RELATED OFFICE OF THE INSPECTOR GENERAL WORK

Audits

- Review of NRC's Protection of Social Security Numbers
- Independent Evaluation of NRC's Security Program as Required by the Government Information Security Reform Act for Fiscal Year 2002
- Review of NRC's Handling and Marking of Sensitive Unclassified Information

Investigations

- Inappropriate Release of Proprietary Financial Information
- Staff Bias in Connection with NRC Workforce Planning Contract

CONCLUSION

While nine distinctive management challenges have been identified, the challenges are also interdependent. NRC needs to continue the important activities it has underway to address these most serious management challenges. To emphasize the importance I place on these concerns for the agency, I have prepared and distributed a pocket sized card detailing these major management challenges confronting the NRC to all employees.

cc: Commissioner Dicus
Commissioner Diaz
Commissioner McGaffigan
Commissioner Merrifield
William Travers, OEDO
John Craig, OEDO

APPENDIX A: MANAGEMENT'S ACTIONS

MANAGEMENT'S ACTIONS TO ADDRESS MAJOR CHALLENGES

1. Protection of nuclear material and facilities used for civilian purposes

In a memorandum dated December 17, 2001, the Office of Inspector General (OIG) added this new management challenge in light of the terrorist attacks of September 11, 2001. The NRC took immediate action as a result of the terrorist attacks, including issuing a notice to advise our reactor and fuel cycle facility licensees to go to the highest level of security and maintaining enhanced 24 hours per day operation of the Emergency Operations Center. The agency also initiated a thorough review of its safeguards and physical security programs.

The NRC reviewed the Strategic Plan to determine if its goals, strategies, and measures adequately address the protection of nuclear materials and facilities. The NRC also developed actions and milestones to meet this challenge and included them in the FY 2004 Budget Estimates and Performance Plan.

For specific actions the NRC took in FY 2002 to address this challenge, please refer to the homeland security discussion in Chapter II of this report. Among those actions was the identification of events involving the loss or theft of licensed material where the form and quantity of material warranted increased attention with respect to the potential for its use by a terrorist. These events result in an increased level of effort by the NRC, licensees, and law enforcement agencies to recover the material. These events have also provided insights for developing regulatory changes to improve the security and control of licensed material.

2. Development and implementation of an appropriate 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 understand better the risks from licensed activities. The NRC supported the development of the calculation tools and experimental results to provide the basis for risk-informed regulation. Risk-informed regulation is an approach to decisionmaking that uses risk analysis along with engineering studies to focus regulatory and licensee attention on design and operational issues commensurate with the risk they pose to public health and safety. Incorporating risk analysis into regulatory decisions improves the regulatory process by focusing staff and licensee activities on the areas of highest risk, reducing the burden on licensees, and increasing the efficiency and effectiveness of agency resources.

The agency made the continued development and implementation of risk-informed and performance-based practices a key strategy to accomplishing its strategic and performance goals in the FY 2000-2005 Strategic Plan. The Commission has developed a risk-informed regulatory implementation plan to further its goal of applying risk techniques broadly to its regulatory processes. The 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 towards its goal to make NRC activities and decisions more effective, efficient, and realistic. During FY 2002, the NRC has taken actions in each arena to meet this challenge.

Nuclear Reactor Safety Arena: The NRC assessed stakeholder feedback and reviewed annual assessments during FY 2002 to determine the success of implementing its revised Reactor Oversight Process (ROP). The assessments show that the revised ROP has resulted in a more objective, risk-informed, and predictable regulatory process. The risk-informed ROP has focused NRC and licensee resources on aspects of plant performance with the greatest impact on safe plant operation.

During FY 2002, the Office of Nuclear Regulatory Research recommended the use of risk-inform requirements for emergency core cooling systems for reactors. A research information letter provides the technical basis for considering revisions to the emergency core cooling system acceptance criteria and certain features of the evaluation model requirements. The proposed changes would give licensees flexibility regarding power uprates.

In addition, the NRC drafted a proposed rule on special treatment requirements and obtained stakeholder feedback. Special treatment refers to current requirements imposed on structures, systems, and components that exceed industry-established requirements for equipment classified as commercial grade. These extra requirements provide additional confidence that the equipment can meet its functional requirements under design basis conditions.

Nuclear Materials Safety Arena: The Office of Nuclear Materials Safety and Safeguards has several risk-informing initiatives designed to identify and assess risks associated with a diversity of regulated activities systematically. These risk insights will improve the efficiency and effectiveness of NRC's licensing and inspection programs. In FY 2002, the NRC completed case studies that evaluated the use of risk insights for regulatory activities in the nuclear materials and waste safety arenas, and completed a report that integrated the final results of these case studies.

In FY 2002, the NRC implemented the revised Manual Chapter (MC) 2604, Licensee Performance Review. The revision makes the fuel cycle licensee performance review process more timely and risk-informed, and will allow the agency to focus more quickly on declining performance trends in safety-significant activities at licensed facilities.

Also, the NRC revised and issued for public comment the MC 2600, Fuel Cycle Facility Operational Safety and Safeguards Inspection Program. The revised program will incorporate the operating experience gained during the transition from a compliance-based to a more risk-informed program The revisions better define the program management oversight process. This program is scheduled to begin in FY 2003.

In FY 2002, the NRC published NUREG-1520, Standard Review Plan for the Review of an Application for a Fuel Cycle Facility. This document provides guidance to staff to ensure the quality and uniformity of the reviews required by new requirements in the revised 10 CFR Part 70. The revised Part 70 increases the use of risk information for fuel cycle facilities.

In FY 2002, the NRC published revised 10 CFR Part 35, Medical Use of Byproduct Material. This rule provides a more risk-informed, performance-based approach to the regulation of medical licensees. Also in FY 2002, the NRC completed a report on the results of the medical pilot inspection program.

This program employed a risk-informed, performance-based approach to conducting inspection and enforcement efforts.

In FY 2002, NRC issued a Temporary Instruction (TI) pertaining to the materials inspection program. This TI allows inspection procedures to be revised, beginning in October 2002, to use risk studies and operational data in establishing inspection priorities. It also provides additional methods for improving the materials inspection program.

The agency also relied on risk insights from NUREG/CR-6642, Risk Analysis and Evaluation of Regulatory Options for Nuclear Byproduct Material Systems, in re-evaluating inspection priorities.

Nuclear Waste Safety Arena: In resolving the key technical issues associated with the potential High-Level Waste (HLW) repository, the Office of Nuclear Materials Safety and Safeguards employs a regulatory approach that considers risk insights from a systems approach based upon performance assessment. The agency ensures that reviews are graded, based on their significance to repository performance. Several examples of NRC efforts to incorporate risk insights into its reviews are included as follows:

In FY 2002, the NRC published 10 CFR Part 63, the site-specific, performance-based regulation applicable to the proposed repository at Yucca Mountain, Nevada.

In July 2002, NRC issued the Integrated Issue Resolution Status Report (IRSR) for the proposed geologic repository at Yucca Mountain. This report identifies the status of NRC and DOE prelicensing interactions on key technical issues important to repository performance.

The NRC provided preliminary site sufficiency comments to the DOE proposal for the HLW repository at Yucca Mountain. The staff used the key technical issue resolution status reports to risk-inform its sufficiency review.

The NRC also issued draft Revision 2 of the Yucca Mountain Review Plan (YMRP) for public comment and held a number of public meetings in Nevada to discuss the document. The YMRP describes how the staff will review DOE's license application against the requirements in 10 CFR Part 63. To the extent practical, the YMRP is risk-informed and performance-based.

In FY 2002, the NRC initiated a Risk Insights Initiative that will assist the staff in identifying the most important information related to the performance of the proposed Yucca Mountain repository and to the resolution of licensing issues. NRC staff has identified nine key technical issues that are most significant to repository performance, one of which is thermal effects on flow of water. The NRC and the DOE have developed formal agreements on the information that DOE needs to furnish in order to address each of these issues and related subissues. The Risk Insights Initiative was presented by NRC staff to the Advisory Committee on Nuclear Waste, and the initiatives will continue in FY 2003. The initiative will help focus regulatory activities and support risk-informed decisionmaking during the prelicensing and licensing phases of the repository program.

In addition, risk-informing initiatives were undertaken in the decommissioning program. For example: During FY 2002, staff in the nuclear waste safety arena continued progress towards

completing of a multi-year effort to update, consolidate, and make more risk-informed and performance-based the current decommissioning guidance in NUREG-1757, Consolidated NMSS Decommissioning Guidance, by issuing Volume 1 for public comment.

The NRC evaluated the decommissioning inspection program and made improvements to better focus resources on sites where significant decommissioning activities are occurring. Also in FY 2002, the NRC completed case studies that evaluated the use of risk insights for regulatory activities in the nuclear materials and waste safety arenas. The staff completed a report integrating—the final results of these case studies.

3. Acquisition and implementation of information resources

The discussion of the President's Management Agenda for Expanded Electronic Government deals extensively with this issue. Please see that section for a description of NRC actions that addressed this management challenge in FY 2002.

4. Administration of all aspects of financial management

The discussion of the President's Management Agenda for Improved Financial Management deals extensively with this issue. Please see that section for a description of NRC actions that addressed this management challenge in FY 2002.

5. Clear and balanced communication with external stakeholders

Building and maintaining public trust and confidence is an important NRC goal and appears among the performance goals for each arena. An important part of establishing public confidence in the NRC is providing stakeholders with clear and accurate information about, and a meaningful role in, the agency's regulatory programs. The following actions were undertaken in FY 2002 by NRC to address this challenge.

Nuclear Reactors Safety Arena: The NRC developed and issued an array of plans governing communications on topics such as the issuance of security orders to operating power plants, extended power uprates, and the reactor vessel head degradation at Davis-Besse.

The License Renewal Program conducted 22 public meetings on environmental issues associated with the continued operation of specific nuclear power plants. These meetings afforded the NRC the opportunity to solicit stakeholder viewpoints and provided stakeholders the opportunity for meaningful exchange of information on the potential for environmental effects of continued operation. The NRC held these meetings in the vicinity of those affected by its actions.

The NRC held 22 public meetings on issues surrounding the reactor vessel head degradation at the Davis-Besse nuclear power plant and the NRC's response and evaluation. These meetings informed external stakeholders about the status of the NRC's oversight activities and gave citizens the opportunity to comment and ask questions. Nearly half of these meetings took place in the locality of the Davis-Besse Plant.

The NRC held public meetings in the vicinity of each nuclear power plant during FY 2002 to discuss the NRC's annual assessment of the plant's safety performance. These meetings provided external stakeholders with information on each plant's safety performance and the NRC's role in ensuring safe operation.

Nuclear Materials Safety Arena: The NRC implemented an array of integrated plans governing communications regarding: Event Response and Assessment, Mixed-Oxide Fuel (MOX) Fuel Fabrication Facility Licensing, Materials Inspections, Part 35--Medical Uses, Enrichment Technology, and Uranium Recovery Issues.

The NRC coordinated with DOE on several projects, including the MOX Facility, the potential for NRC external regulation of DOE non-defense laboratories, and on uranium enrichment issues.

The Fuel Facilities Licensing and Inspection Program conducted 24 public meetings on significant regulatory issues. These meetings gave the NRC the opportunity to solicit stakeholder viewpoints and provided stakeholders with the opportunity to exchange information on a variety of issues, including the MOX licensing initiative and the integrated safety analysis required by the revised Part 70. Most of these meetings took place in the vicinity of those affected.

The NRC held a series of public meetings and workshops with medical community stakeholders to ensure their understanding of the changes associated with 10 CFR Part 35 workshops throughout the country, conducted in English and Spanish, helped to develop licensing and inspection guidance. Medical stakeholders played a key role and had substantive input to the process.

The NRC also worked closely with the States to ensure a close dialogue in the regulation of radioactive material. The NRC participated in the Organization of Agreement States meeting in October 2001. The NRC also sent representatives to the Conference of Radiation Control Program Directors meeting in May 2002.

In June 2002, NRC staff participated in the 6th International Conference on Probabilistic Safety Assessment and Management. NRC staff wrote or co-wrote eleven papers presented at the conference. The papers discussed NRC's program for adding risk information to its nuclear materials and nuclear waste safety arena activities.

The Risk Task Group (RTG) of the Office of Nuclear Materials and Safeguards conducted a series of public meetings and workshops to solicit public comment on case studies of regulatory applications amenable to expanded use of risk assessment. At an October 25, 2001, public meeting, RTG staff reported on the integration of all the case studies, the screening criteria, draft safety goals, and further plans for using risk-informing the regulatory process for the safe use of nuclear materials.

Nuclear Waste Safety Arena: NRC staff met with representatives of the State of Nevada and several counties, including elected officials and members of the public, to address health and safety issues associated with a possible licensing decision on a HLW repository, and NRC's role in licensing. NRC staff also held three public meetings to discuss and receive comments on the draft YMRP, a key licensing document used by the staff.

The NRC held public outreach meetings for a proposed rulemaking on Part 71, Packaging and Transportation of Radioactive Materials. The NRC also held public meetings at the Duke Energy, Pilgrim, Oyster Creek, and Maine Yankee sites. At

these meetings, staff responded to citizens' concerns about storage and transportation issues.

The NRC held public meetings with interested stakeholders at sites and facilities that are undergoing decommissioning. The facilities included West Valley, New York; Hematite, near St. Louis, Missouri; and Maine Yankee, in Wisscaset, Maine. The NRC also developed and implemented public communications plans for Site Decommissioning Management Plan (SDMP) sites to enhance outreach activities with stakeholders. A workshop for licensees and others was held to discuss facilitating public involvement at restricted use sites.

The NRC developed the Spent Fuel Transportation Communication Plan, which provides a focused approach for the public outreach and communication efforts related to spent fuel transportation.

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

Nuclear Reactor Safety Arena: During FY 2002, the offices involved in the nuclear reactor arena met periodically with intra-agency stakeholders to enhance communication and support functions. Offices in the arena also identified internal stakeholders as a targeted audience in their communication plans.

Through frequent communications at all managerial levels including monthly management meetings, the Office of Nuclear Reactor Regulation and the Office of Nuclear Regulatory Research have achieved a balanced perspective representing a more senior management point of view on their interactions. This has reduced informal and unstructured communication between the staff and improved work processes and products.

The NRC continued to improve interface between its offices during FY 2002 through periodic meetings to enhance integration and cooperation. Communication between headquarters offices and regional offices improved as a result of frequent conference calls at both the staff and senior management levels, trips, weekly informational e-mail, and the effective use of internal web sites. During FY 2002, the offices also encouraged rotating staff assignments throughout the organization in order to encourage share and increase team-building.

Nuclear Materials Safety Arena: The arena has expanded the use of meetings in which Division Director from Headquarters meet with their regional counterparts to improve communication and reach agreement on solutions to policy and technical issues. The agency held two such meetings in FY 2002. The Office of Nuclear Material Safety and Safeguards (NMSS) continued its increased focus on regularly scheduled and effective staff meetings at all levels throughout the organization to ensure open lines of communications. The NMSS also encouraged and supported rotating staff assignments throughout the organization, and team work group assignments, in order to share insights across arenas and to promote team-building and arena-based solutions to issues.

Managers of NMSS and the Office of State and Tribal Programs held periodic counterpart meetings to ensure communication on items of mutual interest.

To facilitate effective communication and enhance integration and cooperation in areas of common concern, NMSS and the Office of Nuclear Security and Incident Response have designated points of contact for each area and conduct routine meetings to share information.

Nuclear Waste Safety Arena: NMSS continued its increased focus on regularly scheduled and effective staff meetings at all levels throughout the organization to ensure open lines of communication.

The use of management boards has improved interoffice communication on important issues such as high-level waste management and decommissioning. These Boards meet biweekly to discuss status reports regarding action items and to provide additional direction to these programs, particularly in the area of policy issues. In FY 2002, at the annual meeting of counterparts, decommissioning staff from headquarters and regions discussed and resolved significant policy and technical issues associated with the decommissioning program.

7. Integration of regulatory processes in a changing external environment.

The NRC uses its planning, budgeting, and performance measurement process to integrate its regulatory processes and ensure that it is able to respond to changes in its environment. Each year the Program Review Committee holds planning sessions to ensure that the Commission regulatory processes are integrated and resources allocated where needed. These plans are approved by the Commission during the budget process. In addition, the Executive Director for Operations holds meetings to ensure integration across the arenas.

Nuclear Reactor Safety Arena: One of the most important changes facing the nuclear reactor safety arena is the consolidation and restructuring of nuclear power assets. The NRC conducted a study to assess the safety implications of consolidation within the industry. The agency published the study in FY 2001 to allow the public a chance to comment on the NRC's findings and then held a public workshop to address comments on the paper. Staff presented the final paper to the Commission in FY 2002.

Nuclear Materials Safety Arena: Quarterly meetings of the Probabilistic Risk Assessment Steering Committee ensure that risk-informed activities are integrated across the agency.

NRC managers' participation on the Research Effectiveness Review Board ensures the effectiveness of the agency's research program in meeting agency-wide needs.

A Risk Steering Committee provides guidance and sets expectations for the NMSS Risk Task Group for implementing risk-informed initiatives in the nuclear materials and waste safety arenas. The committee comprises of managers and staff from the NMSS, NRR, and Nuclear Regulatory Research with expertise in risk-informing initiatives. These experts also provide peer review of risk-informed products.

The Rulemaking Coordinating Committee (RCC), formed in 1998 ensures that the NRC rulemaking process remains consistent throughout the NRC. The RCC consists of managers from the NMSS, NRR, Office of Administration, and Office of the General Counsel who routinely meet to discuss rulemaking-related issues. The primary focus of the RCC is to ensure consistency in methods used to develop and promulgate rules and to facilitate initiatives for improving all aspects of the rulemaking process. In a recent initiative, the RCC was the established an interoffice task force to review the current

rulemaking process and identify areas with potential for process improvements and/or enhancements. The task force recently briefed the RCC on the preliminary findings of the review.

The NRC's Response to Terrorist Attacks (RTA) Task Force, formed after September 11, 2001, worked to ensure an integrated agency response to the security issues raised by the events of terrorist attacks. The RTA Task Force prepared the "Scoping Paper for Comprehensive Review of the NRC's Safeguards and Security Programs in Light of the Terrorists Attacks on September 11, 2001." This paper outlined a proposed course of action and schedule for conducting a comprehensive review of the NRC's safeguards and physical security programs, and identified preliminary policy issues for consideration. With the establishment of the NRC's Office of Nuclear Security and Incident Response (NSIR), the Task Force was disbanded and its functions assumed by NSIR.

Nuclear Waste Safety Arena: The Offices of the General Counsel, Secretary to the Commission, Chief Information Officer, Atomic Safety Licensing Board Panel, and Nuclear Materials Safety and Safeguards continued to work together to prepare for receipt of the HLW repository license application and hearing. This effort involves putting the systems and process in place to fulfill the 3-year mandate.

The NMSS and the NRR have worked in partnership to draft a plan for transfer of project management responsibility for regulatory oversight of decommissioning commercial nuclear reactor plants. This plan would change the point at which oversight transfers from the NRR to the NMSS from that set forth in a March 15, 1995, MOU between the two offices. The planned changes will improve efficiency and effectiveness by placing responsibility for power reactor decommissioning within the NMSS, which conducts a large-scale decommissioning program for numerous sites. The NRR will continue to provide technical support as requested by the NMSS.

Quarterly meetings of the Probabilistic Risk Assessment Steering Committee ensure that risk-informed activities are integrated across the agency.

NRC managers' participation on the Research Effectiveness Review Board ensures the effectiveness of the agency's research program in meeting agency-wide needs.

8. Maintenance of a highly competent staff (i.e., human capital management)

The discussion of the President's Management Agenda for Strategic Management of Human Capital deals extensively with this issue. Please see that section for a description of NRC actions that addressed this management challenge in FY 2002.

9. Protection of information

In a memorandum dated November 18, 2002, the OIG added this new management challenge. The NRC is reviewing of the Strategic Plan to determine if our goals, strategies, and measures address protection of information. The NRC is currently developing actions and milestones to meet this challenge and will include them in the FY 2005 Budget Estimates and Performance Plan.

➤ Transportation of nuclear waste

APPENDIX B:

MANAGEMENT DECISIONS AND FINAL ACTIONS ON OIG AUDIT RECOMMENDATIONS

The agency has established and continues to maintain an excellent record in resolving and implementing open 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. Because of the sensitivity of contractual negotiations, details of these contract audits are not furnished as part of this report. As of September 30, 2002, there were no outstanding audits recommending that funds be put to better use.

MANAGEMENT DECISIONS NOT IMPLEMENTED WITHIN ONE YEAR

Management decisions were made before September 2001 for the OIG audit reports discussed in the following paragraphs. As of September 30, 2002, the 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

December 14, 1999

The OIG recommended that the methodology for calculating the hourly rate be reevaluated to include

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

For the Period October 1, 2001-September 30, 2002

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.	7	$314,667	$0
3. Audit reports on which final action was taken during this report period.	7	$314,667	$0
(i) Disallowed costs that were recovered by management through collection, offset, property in lieu of cash, or otherwise.	7	$314,667	$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

APPENDIX B

the full-cost concept as embodied in OMB Circular No. A-25, User Charges, and SSFAS Number 4 and that actual billing and cost data be used to refine future rate calculations. The NRC implemented a managerial cost accounting system in FY 2002, and cost data from this system was used as input to review the existing rate, including identification and assignment of direct and allocated indirect costs. The agency's plan for further corrective actions is under development.

Review of the Development and Implementation of STARFIRE

June 29, 2000

The OIG recommended that the definition of "significant variation" from approved costs, schedule, and performance goals for major IT projects be clarified so that senior agency managers can make informed decisions about whether or not to continue, modify, or terminate major IT projects. Variance from approved cost, schedule, and performance goals is discussed in Management Directive and Handbook 2.2, Capital Planning and Investment Control (CPIC). As part of the CPIC process lessons learned review that is currently under way, variance from approved cost, schedule, and performance goals is being further defined and clarified and alternative approaches for monitoring progress are being considered. The results will be incorporated into the revised management directive and handbook, which is expected to be issued by the end of calendar year (CY) 2003. Issuance of the revised management directive and handbook will complete agency action on the OIG's recommendations from this audit.

Review of Audit Follow-up System

August 14, 2000

The OIG recommended that the Management Directive Handbook 6.1, Resolution and Follow-up of Audit Recommendations, governing resolution and follow-up of audit recommendations be revised to reflect periodic scheduling standards for conducting analyses of audit recommendations to determine possible trends and system-wide problems and for conducting audit follow-up reviews. The NRC staff is revising the management directive handbook to include annual trend analysis reviews and biannual audit follow-up reviews. These and other revisions to improve the handbook are expected to be completed during CY 2003. Issuance of the revised management directive handbook will complete agency action on the OIG's recommendations from this audit.

Review of NRC's Differing Professional View/Differing Professional Opinion Program

September 20, 2000

The OIG recommended that Management Directive 10.159 be revised to improve the oversight and timeliness of the Differing Professional View/Differing Professional Opinion (DPV/DPO) processes, that awards be publicized for outstanding issues benefiting the agency that resulted from DPVs/DPOs, and that a special review group be convened every 3 years to assess the DPV/DPO program operations. A Special Review Panel was convened in May 2001. The review panel reviewed all DPV/DPO cases files since the last special panel met in 1994, and in December 2001 completed interviews of the NRC office directors, regional administrators, DPV/DPO filers, ad hoc panel chairs, and selected DPO/DPV panel members. The review panel analyzed and evaluated the data col-

lected through its interviews, considered the OIG's recommendations, and issued a report and recommendations in June 2002. Changes to the process in response to the review panel's recommendations have been incorporated in the revised management directive and handbook, which is expected to be issued in early CY 2003. In response to review panel recommendations, the contributions of several not previously recognized DPV/DPO filers were recognized through special act awards, which were conferred in late FY 2002 and early FY 2003. Although the revised management directive and handbook are not expected to be issued until early CY 2003, as of November 22, 2002, the OIG closed out all of the remaining recommendations related to this audit.

Special Evaluation of the Role and Structure of NRC's Executive Council

August 31, 2000

The OIG recommended that the 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 the 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. Of the 32 NRC 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, 10 have been revised and published and 9 have been judged by their originating offices to need no revision. Thirteen management directives are in various stages of development, review, and concurrence and are expected to be issued during FY 2003. Issuance of the remaining 13 revised management directives will complete agency action on the OIG's recommendations from this audit.

The National Materials Program Steering Committee

December 14, 2000

The OIG recommended that the NRC define the role and responsibilities of the National Materials Program Steering Committee (NMPSC) vis-à-vis the National Materials Program Working Group and establish a requirement in the management directives that agency steering committees formally define their roles and responsibilities. The NRC issued a charter for the NMPSC in December 2000. Management Directive and Handbook 5.3, NRC and Agreement State Working Groups, was revised in July 2002 and now establishes the role and responsibilities of steering committees with respect to aiding an NRC/Agreement State Working Group to accomplish its objectives. In order to complete agency action on the OIG's recommendations from this audit, however, the NRC needs to develop a requirement in the management directives that agency steering committees formally define their roles and responsibilities. This is planned for completion before the end of CY 2003.

Review of NRC's Quality Assurance Process for Official Documents

February 23, 2001

The OIG recommended that the NRC improve its quality assurance process for official documents by revising Management Directive and Handbook 3.57,

APPENDIX B

Correspondence Management. Specifically, the OIG recommended that the NRC clearly establish the responsibilities of the document originator and concurrence chain reviewers with regard to accuracy of final products and to set clear expectations for document originators concerning fact-checking methods and provide clear expectations for the NRC staff to heighten awareness of the importance of information accuracy. Interim NRC policy guidance on ensuring the technical accuracy and readability of the NRC's documents and correspondence was issued to all NRC employees in May 2001. A revision of Management Directive and Handbook 3.57, incorporating this policy and other needed updates, is expected to be issued in late FY 2003, which will complete agency action on the OIG's recommendations from this audit.

Government Performance and Results Act:Review of the FY 1999 Performance Report

February 23, 2001

The OIG recommended that the NRC develop the management control procedures needed to produce valid and reliable performance data. Interim guidance for performance management and reporting performance information was issued in July 2001. The NRC staff drafted a new management directive and handbook during FY 2002, which is circulating for review and comment. The new management directive is expected to issued by the end of 2003, which will complete agency action on the OIG's recommendations from this audit.

Review of NRC's Website Privacy Policy: Internet Cookies

February 16, 2001

The OIG recommended that the NRC develop written policy guidance to establish management controls over and prohibit the NRC and third-party contractors from collecting personally identifiable information from visitors to the NRC Website. The NRC issued interim guidance on the NRC's Website privacy policy in November 2001, which prohibits the NRC and its third-party contractors to send persistent Internet cookies, place persistent cookies on users' computers, or collect personally identifiable information from visitors to the NRC Website (with some exceptions). This policy has been incorporated in a revision of Management Directive and Handbook 3.14, U.S. Nuclear Regulatory Commissions External Web site, which is expected to be issued in mid-FY 2003. Issuance of this revised management directive and handbook will complete agency action on the OIG's recommendations from this audit.

Review of NRC's Workforce Planning

September 24, 2001

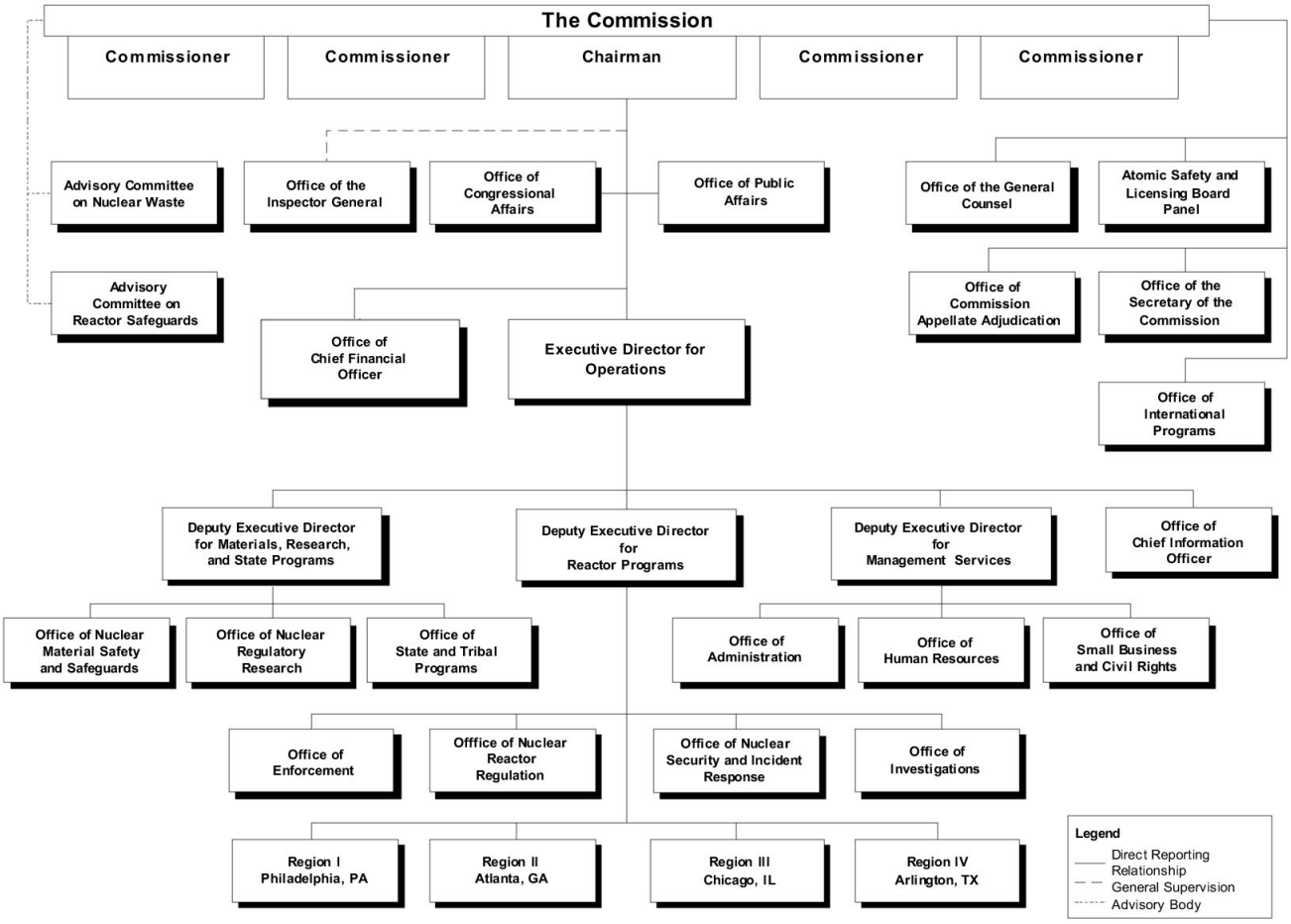
The OIG recommended that the NRC integrate, communicate, and institutionalize workforce planning at the NRC. During FY 2002, the agency developed and began implementing an iterative, agencywide workforce planning process that obtains skills and competency needs forecasts at the beginning of each budget cycle, compares these to current and projected skills availability data to identify gaps, and factors resources needs to carry out gap-closure strategies into the budget. This approach for addressing the NRC's human capital needs was first imple-

mented as part of the FY 2003 PBPM process. A plan addressing the types and timing of communications required to provide the right information on the workforce planning approach at the right time to targeted internal stakeholders was developed and implemented. A committee of the NRC's Executive Resources Board was chartered to serve in an oversight role to periodically review the strategic workforce planning process and gauge its effectiveness. A multidisciplinary team comprised of a core group from the Office of Human Resources and representatives from every NRC office and region was established to coordinate workforce planning activities and serve as a communications link at all levels of the agency. Although these agency actions were implemented before the end of FY 2002, full integration of workforce planning in the PBPM process and establishment of workforce planning performance measures, were not documented as completed until after the end of the fiscal year. Agency action on the OIG's recommendations from this audit was complete as of October 2002.

➤ NRC employees confer outside NRC headquarters building

APPENDIX C
ORGANIZATIONAL CHART

NRC ORGANIZATIONAL CHART AS OF SEPTEMBER 30, 2002



➤ McGuire Nuclear Power Plant, Charlotte, North Carolina

APPENDIX D
GLOSSARY OF ACRONYMS

ACR	Advanced Candu Reactor
ADAMS	Agencywide Documents Access and Management System
AID	Agency for International Development
AO	abnormal occurrence
ASLBP	Atomic Safety and Licensing Board Panel
ASP	accident sequence precursor
CEE	Central and Eastern Europe
CFO	Chief Financial Officer
CFR	Code of Federal Regulations
CIA	Central Intelligence Agency
CIO	Chief Information Officer
CNS	Convention on Nuclear Safety
CPIC	capital planning and investment control
CRCPD	Conference of Radiation Control Program Directors
CSRS	Civil Service Retirement System
CY	calendar year
DCS	Duke, Cogema, Stone & Webster
DMP	Decommissioning Management Plan
DOE	Department of Energy
DOL	Department of Labor
DOT	Department of Transportation
EA	Enterprise Architecture
EDO	Executive Director for Operations
E-Gov	electronic Government
EIA	Energy Information Administration
EIE	Electronic Information Exchange
FACTS I	Federal Agencies' Centralized Trial Balance System
FAIR	Federal Activities Inventory Reform
FBI	Federal Bureau of Investigations
FECA	Federal Employees Compensation Act
FERS	Federal Employees Retirement System
FFMIA	Federal Financial Management Improvement Act
FFS	Federal Financial System
FICA	Federal Insurance Contribution Act
FMFIA	Federal Managers' Financial Integrity Act of 1982
FSU	Former Soviet Union
FY	fiscal year
GAO	General Accounting Office
GISRA	Government Information Security Reform Act
GPEA	Government Paperwork Elimination Act
GPRA	Government Performance and Results Act
GSA	General Services Administration
GTMHR	Gas Turbine Modular Helium Reactor
HEU	Highly-Enriched Uranium
HLW	High-Level Waste

APPENDIX D

HLW-EHD High-Level Waste Electronic Hearing Docket

HRMS Human Resources Management System

I & C Instrument and Control

IAEA International Atomic Energy Agency

ICMs Interim Compensatory Measures

IMPEP Integrated Materials Performance Evaluation Program

Improvement Act Federal Management Improvement Act of 1996

Integrity Act Federal Managers' Financial Integrity Act of 1982

IPAC Intra-Government Payment and Collection

IRIS International Reactor Innovative and Secure

IRSR Issue Resolution Status Report

IT Information Technology

LPP Leadership Potential Program

LSN Licensing Support Network

MC Manual Chapter

MOU Memorandum of Understanding

MOX Mixed-Oxide Fuel

MRB Management Review Board

MUR Measurement Uncertainly Recapture

MWe Megawatts Electric

NARA National Archives and Records Administration

NMED Nuclear Materials Event Database

NMPSC National Materials Program Steering Committee

NMSS Office of Nuclear Materials Safety and Safeguards

NRC Nuclear Regulatory Commission

NRR Office of Nuclear Reactor Regulation

NSIR Office of Nuclear Security and Incident and Response

NWPA Nuclear Waste Policy Act of 1982

OAS Organization of Agreement States

OCFO Office of the Chief Financial Officer

OIG Office of the Inspector General

OMB Office of Management and Budget

OPM Office of Personnel Management

PBPM Planning, Budgeting, and Performance Management

PFS Private Fuel Storage, LLC's

PI Performance Indicator

PRB Petition Review Board

PWR Pressurized-Water Reactor

RCC Rulemaking Coordinating Committee

REIRS Radiation Exposure Information Report System

RIRIP Risk-Informed Regulation Implementation Plan

ROP Reactor Oversight Process

RPV	Reactor-Pressure Vessel
RTA	Response to Terrorist Attacks
RTG	Risk Task Group
SCSS	Sequence Coding and Search System
SDMP	Site Decommissioning Management Plan
SES	Senior Executive Service
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
SS&D	Sealed-Source And Device
TSP	Thrift Savings Plan
USEC	United States Enrichment Corporation
YMRP	Yucca Mountain Review Plan

ENDNOTES

Endnotes for Nuclear Reactor Safety section

1. The information in the subject graphs is based entirely on fiscal year data. Because of an administrative error, the graphs included with the FY 2001 report provided both calendar year data (through 1995) and fiscal year data (thereafter). In addition, performance indicator results are subject to minor variations when licensees submit revisions to the source data. These revisions also resulted in small changes to the FY 2000 data provided in the FY 2001 report.
2. "Nuclear reactor accidents" are defined in the NRC Severe Accident Policy Statement (50 Federal Register 32138, 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, notifications are required for those non-emergency events specified in the regulations. The NRC periodically evaluates licensee compliance with notification regulations. 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 to the NRC. The NRC periodically evaluates licensee compliance with the reporting criteria and radiological release criteria. A resident inspector monitors the facility and would be aware of 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 to the NRC. The NRC periodically assesses licensee compliance with the reporting criteria and radiological release criteria. A resident inspector monitors the facility and would be aware of significant radiation exposures.
5. **Data sources and verification:** Licensees are required to call the NRC to report any breaches of security or other event that may potentially lead to sabotage at a nuclear facility within one hour of that occurrence. Information assessment teams would follow-up any significant events. The licensee would also file a written report within thirty days of such an event. The investigation would verify the accuracy of the information.
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 Table 2 (air and water) of Appendix B, Part 20). **Data sources and verification:** The NRC requires licensees to report radiation exposures to the NRC. The NRC periodically assesses licensee compliance with the reporting criteria and radiological release criteria. A resident inspector monitors the facility and would be aware of instances in which radiation is released from the reactor in excess of reporting limits.
7. The agency provides oversight of plant safety performance on a plant-specific basis as well as on an industry-wide basis. As a refinement to the existing process, the specific parameters and criteria for measuring statistically significant adverse trends in industry-wide safety performance will be developed. The parameters to be monitored will include NRC-approved performance indicators, inspection findings, accident sequence precursor results, and other risk-related indications or measures of industry safety performance that will be developed and qualified for use in phases. **Data sources and verification:** The NRC monitors industry safety performance through its reactor oversight process. Licensees are required to file reports

that contain operational and event information. NRC Inspections confirm that these reports are complete and reliable.

➤ 8. Such events have a 1/1000 (10-3) or greater probability of leading to a nuclear reactor accident. **Data sources and verification:** The NRC's Accident Sequence Precursor program (ASP) systematically evaluates operating experience to identify, document, and rank events that have the potential to cause core damage. A computer screening of licensee event reports or other events designated by NRC staff identifies these events. Selected events then undergo an engineering evaluation to identify, analyze, and document precursor events. A preliminary analysis of potential precursor events is submitted for independent peer review by licensees and NRC staff to ensure that the plant design and its response to the precursor event are correctly characterized.

➤ 9. Overexposures are those that exceed limits as 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:** Licensees are required to file reports that contain information on events of radiation exposure to an individual. Inspections confirm that event reports are complete and reliable. In addition, areas of a nuclear facility that may be subject to radioactive contamination have monitors that record radiation levels. Any occurrence of radioactive levels exceeding regulatory limits would be identified.

➤ 10. These are releases for which a 30-day reporting requirement under 10 CFR 20.2203(a)(3) applies. **Data sources and verification:** Licensees are required to file reports that contain information on events of excess radiation exposure or concentrations of radioactive material. The NRC conducts inspections of licensees to ensure that releases to the environment through effluent pathways are being properly monitored and controlled. Any instance in which radiation had been released to the environment would be recorded on monitors and a follow-up investigation would be conducted.

➤ 11. **Data sources and verification:** The NRC tracks a variety of security performance data furnished by licensees to determine trends in physical security over time.

➤ 12. Three events were identified in FY 2002 as having the potential of being "siginificant" precursors. The preliminary results of the Accident Sequence Precursor Program analysis show that a design deficiency that existed at both units at a multi-unit site does not meet the "siginificant" precursor criteria. The analysis is undergoing peer review. Another potentially "significant" precursor involved a reactor pressure vessel head degradation. The detailed Accident Sequence Precursor Program analysis of this event is ongoing. Based on the above preliminary analysis, the second performance measure was not exceeded for FY 2002.

➤ 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 action requested 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 the petition, in whole or in part, or deny the petition. The Director's Decision explains the bases upon which the petition has or has not been granted or denied and identifies the actions that NRC staff has taken or will take in response to the petition.

➤ 14. 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 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.

Endnotes for Nuclear Materials section

1. The measure results are actual data that the NRC and Agreement States received as of November 2002, and the analysis of these data is complete. However, the NRC and Agreement States may still receive data from licensees (which occurred during FY 2002), which will be reported in the following years Performance and Accountability Report.
2. **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 that are used to disseminate the information widely to the appropriate managers and staff. For Nuclear Materials Safety arena activities, the Nuclear Materials Event Database (NMED) is an essential system used to collect 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 or not 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 as received from the licensees, and entering them into NMED.
3. Significant exposures are defined as those that result in unintended permanent functional damage to an organ or a physiological system as determined by a physician. Hazardous material (as defined by the Occupational Safety and Health Administration) exposures only apply to fuel cycle and uranium recovery activities in the Nuclear Materials Safety arena. **Data source and verification:** Events meeting this threshold would be reported to the NRC and/or Agreement States through a number of sources but primarily through required licensee notifications. Event Notifications and Preliminary Notifications are used to communicate this information internally. For Nuclear Materials Safety arena activities, the NMED is an essential system used to collect information on such events. Significant exposures are defined as those that result in unintended permanent functional damage to an organ or a physiological system as determined by a physician, as agreed upon by NRC or Agreement State technical specialists or our consultants. Hazardous material exposures only apply to fuel cycle activities in the Nuclear Materials Safety arena. 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 mechanism to verify that Agreement States and NRC regions are properly collecting and reporting such events as received from the licensees, and entering them into NMED.
4. Releases that have the potential to cause “adverse impact” are currently undefined. As a surrogate, we will use those that exceed the limits for reporting abnormal occurrences as given by abnormal occurrence criteria 1.B.1 (normally 5,000 times Table 2 (air and water) of Appendix B, Part 20). This information is available in the Abnormal Occurrence (AO) Report to Congress, NUREG-0090.

Data source and verification: Events meeting this threshold would be reported to the NRC and/or Agreement States through a number of sources, but primarily through required licensee notifications. Event Notifications and Preliminary Notifications are used to communicate this information internally. For Nuclear Materials Safety arena activities, the NMED is an essential system used to collect information on such events. Releases that have the potential to cause "adverse impact" are currently undefined. As a surrogate, we will use those that exceed the limits for reporting AOs as given in AO criteria 1.B.1. 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 as received from the licensees, and entering them into NMED.

➤ 5. In accordance with Appendix G to 10 CFR Part 73 and 10 CFR 74.11(a). **Data source and verification:** Licensees are required to report events in which there are 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 to the NRC Headquarters Operations Center within one hour of their occurrence. The licensee is also required to file a follow-up written report within 30 days of the event to the NRC. The report must include sufficient information for NRC analysis and evaluation. Events are entered and tracked in the NMED. The NRC initiates independent investigations that verify the reliability of reported information. NRC investigation teams evaluate the validity of materials event data, in order to assure that proper event data is being reported and collected. Any failures of appropriate licensee reporting would be discovered through the routine inspection program. The NRC holds periodic meetings to validate previously screened events.

➤ 6. In accordance with the requirements of 10 CFR 95.57. **Data source and verification:** Any alleged or suspected violations of the Atomic Energy Act, Espionage Act, or other Federal statutes related to classified information are reported to the NRC under the requirements of 10 CFR 95.57. However, for 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 of 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 follow up by the NRC.

➤ 7. Performance targets have changed from FY 2000 to FY 2003 to reflect additional historical data.

➤ 8. Reportable events of material entering the public domain in an uncontrolled manner as reported under 10 CFR 20.2201(a)(1)(i) and (ii). The NMED contains the list of these events as reported by the NRC licensees and, through the Agreement States, the Agreement State licensees. **Data sources and verification:** Events meeting this threshold would 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.

➤ 9. **Data sources and verification:** Licensees immediately report criticality events to the NRC Operations Center by telephone. Licensees fol-

ENDNOTES

low up written reports are required to be submitted to NRC within 30 days of the initial report. These reports must contain specific information describing the event as required by NRC regulations. The NRC will dispatch an Augmented or Incident Inspection Team depending on the severity of accident to confirm the reliability of the report. An event of this nature is immediately investigated and followed up.

➤ 10. Performance targets have changed from FY 2000 to FY 2003 to reflect additional historical data.

➤ 11. Overexposures are those exposures that exceed the dose limits as 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. It would also include chemical exposures involving uranium recovery activities under the Uranium Mill Tailings Radiation Control Act. Multiple people may be affected by a single causal event. **Data sources and verification:** Events meeting this threshold would 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 Integrated Materials Performance Evaluation Program also verifies the accuracy of the reported events.

➤ 12. Medical events (misadministrations) as reported under 10 CFR Part 35, as tracked in NMED. Multiple patients may be affected by a single causal event. **Data sources and verification:** Events meeting this threshold would 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.

➤ 13. Performance targets have changed from FY 2000 to FY 2003 to reflect additional historical data.

➤ 14. Events that meet this measure are reportable under 10 CFR 20.2203(a)(3)(ii). These events must document actual releases of material; reportable events involving radiation fields will not be 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 would 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.

➤ 15. 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 to the environment. NRC evaluates intentional violations and deliberations acts against this definition. **Data sources and verification:** Events meeting this threshold would be reported to the NRC and/or Agreement States through a number of sources but primarily through licensee notifications. The NRC responds to either a licensee report or allegation by initiating an independent investigation to verify the validity of the data.

➤ 16. 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:** Events as described above must be recorded within 24 hours 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 assure that the proper event data are being reported and collected.

17. This involves chemical releases from NRC regulated activities under the Uranium Mill Tailings Radiation Control Act. **Data sources and verification:** Events meeting this threshold would 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 judgment of NRC personnel and that of other agencies, such as the EPA, are relied upon to make that determination. Events of this magnitude would result in prompt and thorough investigation.

Endnotes for Nuclear Waste section

1. The measure results are actual data that the NRC and Agreement States received as of November 2002, and the analysis of these data is complete. However, the NRC and Agreement States may still receive data from licensees (which occurred during FY 2002), which will be reported in the following years Performance and Accountability Report.

2. **Data source and verification:** Events meeting this threshold are reported to the NRC and/or Agreement States primarily through required licensee notifications, though other sources may also report events. These events are summarized in Event Notifications and Preliminary Notifications that are used to widely disseminate the information to the appropriate managers and staff. The reports are entered into the NMED for tracking and evaluation purposes. 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. The IMPEP provides a mechanism to verify that Agreement States and NRC regions are properly collecting and reporting such events as received from the licensees, and entering them into NMED.

   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 needed by the licensee and NRC to mitigate the situation and prevent recurrence.

3. 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. **Data sources and verification:** Significant exposures are defined as those that result in unintended permanent functional damage to an organ or a physiological system as determined by a physician, as agreed upon by NRC or Agreement State technical specialists, or our consultants. Events meeting this threshold are reported to the NRC and/or Agreement States primarily through required licensee notifications, though other sources may also report events. Event Notifications and Preliminary Notifications are used to communicate this information internally. The reports are entered into the NMED for tracking and evaluation purposes. The IMPEP provides a mechanism to verify that Agreement States and NRC regions are properly collecting and reporting such events as received from the licensees, and entering them into NMED.

   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 needed 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 will validate previously screened events.

ENDNOTES

4. Releases that have the potential to cause "adverse impact" are currently undefined. As a surrogate, we will use those that exceed the limits for reporting abnormal occurrences as given by AO criteria 1.B.1 (normally 5,000 times Table 2 (air and water) of Appendix B, Part 20). This information is available in the Abnormal Occurrence Report to Congress, NUREG-0090, which can be located at http://www.nrc.gov/NRC/NUREGS/SR0090/V22/sr0090V22.pdf. **Data sources and verification:** Releases of radioactive waste that have the potential to cause an adverse impact on the environment are currently undefined. Therefore, for this performance measure, releases that exceed the limits for reporting AOs as given in AO criteria 1.B.1 are counted as releases that cause an adverse impact on the environment. Events meeting this threshold are reported to NRC and/or Agreement States primarily through required licensee notifications, though other sources may also report events. Event Notifications and Preliminary Notifications are used to communicate this information internally. The reports are entered into the NMED for tracking and evaluation purposes. The IMPEP provides a mechanism to verify that Agreement States and NRC regions are properly collecting and reporting such events as received from the licensees, and entering them into NMED.

   The events reported under this measure are those that threaten the environment. Events of this magnitude are 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 needed 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 will validate previously screened events.

5. In accordance with Appendix G to 10 CFR Part 73 and 10 CFR 74.11(a). **Data source and verification:** Licensees report events that entail losses, thefts, diversions, or radiological sabotage of special nuclear material or radioactive waste within one hour of their occurrence to the NRC Headquarters Operations Center. A follow up written report must be submitted within 30 days of the event to the NRC. The report must include sufficient information for NRC analysis and evaluation. The NRC also initiates an independent investigation of the reported event. Events are entered and tracked by the NMED. Any strategic plan failure results in immediate investigation and follow up and is tracked in the Safeguards Summary Event List Database. Any lack of appropriate licensee reporting would be discovered through the routine inspection program. The NRC holds periodic meetings where staff and management will validate previously screened.

   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.

6. Overexposures are those exposures that exceed the dose limits specified in 10 CFR 20.2203(a)(2).

7. **Data sources and verification:** Events meeting the regulatory threshold are reported to the NRC and/or Agreement States primarily through required licensee notifications, though other sources may also report events. The Integrated Materials Performance Evaluation Program (IMPEP) reviews provide a mechanism to verify that Agreement States and NRC regions are properly collecting and reporting such events as received from the licensees, and that they are being correctly entered into the NRC's Nuclear Materials Events Database.

- 8. NRC recognizes that no explicit reporting requirements exist for substantiated breakdown determination. The NRC relies on its safeguards inspection findings and licensee notifications.
- 9. **Data sources and verification:** Events as described above must be recorded within 24 hours of the identified event in a safeguards log that is maintained by the licensee. No explicit reporting requirements exist for substantiated breakdowns of physical protection. The NRC relies on its safeguards inspection program to help validate the reliability of recorded data and determine whether a breakdown of a physical protection system has, in actuality, resulted in a vulnerability. The NRC also evaluates the event data in order to assure that the proper event data is being reported and collected.
- 10. Releases for which a 30 day reporting requirement under 10 CFR 20.2203(a)(3) is required.
- 11. **Data sources and verification:** Radiological releases to the environment from operational activities that exceed the regulatory limits are required to be reported within 30 days under 10 CFR 20.2203(a)(3). Events meeting this threshold are reported to the NRC and/or Agreement States primarily through required licensee notifications, though events may also be reported by other sources. The reports are entered into the NMED for tracking and evaluation purposes. The IMPEP provides a mechanism to verify that Agreement States and NRC regions are properly collecting and reporting such events as received from the licensees, and entering them into NMED.
- 12. Measuring the protection of future generations over the planning period of the next five years is a unique challenge that the Commission is continuing to evaluate.
- 13. **Data sources and verification:** The NRC monitors events and issues related to the safe use, transport, 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 licensee's or licensee's contractor's current or future inability to perform a required function or activity in a safe manner. Any event, condition or substantiated allegation formally reported to the NRC is evaluated for safety impact and potential generic implications. In FY 2001, the NRC completed a review of formerly terminated licensed sites with potential contamination that could require cleanup and disposal. The NRC identifies a responsible party that will need to clean up such sites and works with the party to facilitate cleanup.
- 14. All of the public outreach meetings were held as scheduled. Three meetings were held in Nevada in April 2002 on health and safety issues associated with a possible licensing decision on a HLW repository, and three meetings were held in May 2002 on the Yucca Mountain Review Plan. An open house was held at the NRC office in Las Vegas, Nevada in September 2002 to discuss the U. S. NRC On-Site Representatives' role for regulating the safety of the proposed radioactive waste repository at Yucca Mountain. Part 71 public meetings were held in Rockville, MD on 6/4/02 and Chicago, IL on 6/24/02.
- 15. 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 action requested 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 the petition, in whole or in part, or deny the petition. The Director's Decision explains the bases upon which the petition has or has not been granted or denied and identifies the actions that NRC staff has taken or will take in response to the petition.

ENDNOTES

16. 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 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 that require extension of the schedule will reset the beginning of the metric to the date of a new acknowledgment letter.
17. Prelicensing activities constitute informal conferences between a prospective applicant and the staff and are not part of a potential licensing proceeding.

Endnotes for International Safety section

1. 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 a 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 International Atomic Energy Agency of a country's "peaceful use" declarations on nuclear materials and nuclear facilities.
2. Significant incidents are incidents that would 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.
3. Under section 123 of the Atomic Energy Act of 1954, 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.

Design:
Eagle Design & Management, Inc.