Performance and Accountability Report
Fiscal Year 2001

U.S. Nuclear Regulatory Commission

The NRC's 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 the public health and safety, to promote the common defense and security, and to protect the environment.

Message from the Chairman

I am pleased to present the Nuclear Regulatory Commission's *Performance and Accountability Report* for Fiscal Year 2001. I am proud to report that we have again achieved all of our safety performance goals. This report also provides financial information, including audited financial statements, which show the prudent management of the funds entrusted to us by the American public.

As with other U.S. infrastructure, the tragic events of September 11th have affected security considerations at nuclear reactors and other commercial nuclear facilities. We are responding to these events by enhancing security in the near term and reevaluating how security can best be provided for the long term. We are confident that, in cooperation with the Office of Homeland Security and other agencies, we will succeed in this effort to protect the U. S. from future attacks.

We have at the same time continued to build on the progress we have made over the past decade to improve nuclear safety. Our oversight of the industry is achieving its objective of promoting safety without stifling the output of energy needed by our Nation, as evidenced by our success in meeting our performance targets. As we look forward, we will continue to conduct an efficient regulatory program that allows the Nation to use nuclear materials for civilian purposes with adequate protection of the public health and safety and the environment. To this end, we have adopted the President's charge to improve management, performance and results.

Moreover, I believe we are well positioned to respond to future industry needs. Demand for electric power and improving economic fundamentals for nuclear power generation have renewed interest in nuclear power as a viable energy source. As a result, licensees are applying to renew their operating licenses for existing plants and are considering new reactor designs and new plant construction. We are responding by adding staff where necessary and reallocating our resources where possible.

We at the U.S. Nuclear Regulatory Commission look forward to continuing to provide high quality service to the American people.

Richard A. Meserve

NRC Principles of Good Financial Management

Those who handle public resources have a special responsibility to safeguard the resources entrusted to them and to use them properly. Poor financial management by NRC can undermine the confidence that we are effectively accomplishing our health and safety mission. NRC managers must ensure that public funds are used for authorized purposes only and that they are used economically, efficiently, and within established limits. Toward these ends, the NRC uses the following Principles of Good Financial Management.

PLANNING. Good financial management begins with good planning. NRC's strategic planning should be based on sound assumptions and accurate information and should provide the foundation for the entire fiscal process. Resource requests must be consistent with program goals, guidance, and planning assumptions, and must consider current financial status. Plans should be developed for commitment and obligation of funds based on program needs, procurement lead times, and the need for continuity of funding.

CONTROL. Good financial management requires good financial control. Appropriate effective cost controls throughout the financial management process ensure adequate accounting of funds expended, prevent over-obligation of funds and inappropriate expenditures, identify early instances where funds should be reallocated, and produce valuable information for the planning process.

COMMUNICATION. Good financial management requires good communication among those involved in the financial management process. Complete, accurate, and timely financial information must be readily available, and financial implications must be considered in decision making. Financial systems should be integrated and meet both agency and office data needs. New information and ideas must be shared throughout the organization.

COST EFFECTIVENESS. Good financial management balances expenditures and results. Managers at all levels must ensure that NRC gets what it pays for and that the results are what NRC needs to accomplish its mission. Ongoing projects should be evaluated to ensure results justify continued funding. Appropriate precautions ensure that waste is avoided. To ensure maximum utility of available resources, funds should be obligated as early as practicable during the fiscal year, and excess funds should be deobligated as soon as practical after project completion.

EVALUATION. Good financial management requires periodic evaluation of performance against meaningful financial and program performance measures. Such performance assessment should evaluate planned versus actual program results as well as the comparison of program costs with program accomplishments.

PERSONNEL. Good financial management is the product of competent and motivated people. Those who are given financial management responsibility must have integrity, dedication, and be well trained and qualified. They must have authority commensurate with their responsibility, and they must be recognized when they achieve superior performance.

Message From the Chief Financial Officer

I am pleased to present the U.S. Nuclear Regulatory Commission's financial statements for FY 2001 as an integral part of the agency's FY 2001 Performance and Accountability Report. I am proud to report that our independent auditor has rendered an unqualified opinion on our financial statements for the eighth 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.

As of September 30, 2001, the financial condition of the NRC is sound with respect to having sufficient funds to meet its mission and having sufficient control of these funds to ensure our budget authority is not exceeded. We successfully established and collected approximately $455 million in fees paid by NRC licensees, or approximately 100 percent of the agency's budget that is subject to fees. Our yearend delinquent debt was only $2.1 million or less than one-half of one percent of the fees collected. Payments to commercial vendors were made on-time 95 percent of the time, and 99 percent of our payments were made electronically.

During FY 2001, NRC produced unaudited, interim financial statements for the first time. We plan to produce unaudited, quarterly financial statements during FY 2002. During FY 2001, corrective actions were completed for four reportable conditions and closed by the auditors. The reportable conditions concerned management controls over the NRC's fee development process, streamlining the financial statement preparation process, documentation of debt collection activities, and compliance with the Debt Collection Improvement Act. In November 2001, the agency replaced its human resources, time and attendance, and payroll systems with a new integrated financial and human resources management and cost accounting system. This allows the agency to accumulate more useful labor costs and use a single entry system to collect information for payroll, fee billing, human resources, and cost accounting purposes.

In addition to preparing financial statements and successfully undergoing the rigors of an independent audit, the agency used its management control program to examine the adequacy of our efforts to protect against waste, fraud, and mismanagement. Our annual assessment revealed some areas that require strengthening. In the financial management area, our efforts to comply with Statements of Federal Financial Accounting Standards, Nos. 4 and 10, relating to managerial cost accounting and accounting for internal use software were incomplete. Building on previous efforts, we have developed and are implementing appropriate remediation plans to correct the deficiencies during FY 2002.

For the current fiscal year, our focus is to provide timely, reliable and useful data to our stakeholders, and using this data to improve our decision making. As such, I anticipate a very productive year and look forward to reporting our successes next year.

Jesse L. Funches

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This report presents the agency's success in meeting its annual performance goals, describes our important accomplishments, the actions we have taken to address our management challenges, and our financial condition during the past fiscal year. Taken in its entirety, this report gives the agency's stakeholders an opportunity to assess how the agency serves the American public and how it manages the funds entrusted to it.

Chapter I: Introduction

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.

In undertaking its mission, the NRC oversees nuclear power plants, non-power reactors, nuclear fuel-cycle facilities, transportation and disposal of nuclear waste, and the industrial and medical uses of nuclear materials. The use of nuclear materials provides many benefits, chief among them the generation of electrical energy and saving lives through medical procedures. It is the NRC's mission to ensure the safe use of these materials. Our strategic and performance goals emphasize the priority we place on safety - safety is paramount.

To be an effective regulator, we also consider the effects our decisions have on the public and the industries we regulate. We have added three additional performance goals to address this area:

- make our decisions more effective and efficient.
- reduce unnecessary regulatory burden.
- increase public confidence.

New Challenges

One of our most important new challenges came at the end of the fiscal year; on September 11, 2001. The terrorist attacks which occurred that day require us to reevaluate our safeguard measures involving nuclear power and materials.

Security against sabotage has always been an important part of our licensing and safeguards

The Nuclear Regulatory Commission Headquarters in Rockville, Maryland

inspection activities. However, the attack on September 11 has changed the threat profile we face. As a result, we have begun to review our security requirements for both reactor and other NRC licensees as well as NRC facilities and staff. We are reevaluating our goals, measures, strategies, and activities to account for this new threat to America.

There have been a number of significant changes in the electrical power generation industry which have also had a significant impact on the Commission and its regulatory programs. The economic deregulation of the electricity-generation industry has resulted in a consolidation and restructuring of nuclear power assets. In addition, the development of a competitive market for electric power supplies has increased financial pressures on NRC licensees to improve efficiencies and improve operating performance. Our challenge is to allow for innovation and improvements by operators in utilizing their power generation facilities while ensuring that safety is not compromised and the focus on safety remains at the forefront of nuclear power.

Response to the Terrorist attacks:

Immediately after the crash into the World Trade Center on September 11, the NRC activated its Emergency Operations Center and issued a notice to advise our reactor and fuel cycle facility licensees to go to the highest level of security. We have maintained enhanced 24 hour per day operation of the Emergency Operations Center since the attack. We evaluate a steady flow of information from the intelligence and law enforcement communities to determine whether to revise the threat advisory for licensees. Working with the Office of Homeland Security, the Commission has taken appropriate steps throughout the crisis to enhance security at all of our licensee facilities. In addition, there has been an increase in state police and National Guard forces at many nuclear facilities.

For decades, security against sabotage has been an important part of our licensing and inspection activities. Nuclear facilities are robust structures. We require that licensees be able to respond with force to armed attackers. However, the attack on September 11 has changed the threat profile we face. As a result, we have undertaken a comprehensive review of safeguards and security policies and strategies and requirements for licensees.

In addition, there is renewed interest in building and operating nuclear power plants. 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 renewed interest in the viability of nuclear energy. The President cited nuclear power as a vital component of America's energy portfolio. As a result, we have seen energy companies renewing their licenses beyond their original 40 year terms, inquiring about potential investments in new reactor design and construction, and submitting applications to increase the power generating capacity of plants currently in operation.

The NRC is responding to these changes in the industry. One of our key strategies is the development and implementation of probabilistic risk models and tools to measure plant performance and focus our attention, and licensee action, on those activities which are the most safety significant. These tools have been integrated into a new reactor oversight process. The new reactor oversight process is built around plant performance indicators to objectively measure plant safety. These risk analysis tools allow the industry and the NRC to efficiently and effectively evaluate plant performance and make adjustments where necessary to ensure that safety is maintained. Our vision is to have a regulatory process focused on safety, that is internally consistent, is easy for licensees and the public to understand and practical for the NRC staff to implement.

We have reviewed reactor license renewals on a timely basis. We have also prepared ourselves in the event that the Department of Energy submits an application for a construction authorization for a high-level nuclear waste geologic repository in Yucca Mountain, Nevada.

Another key issue facing the Commission is the challenge of maintaining our human capital, especially the core technical skills and knowledge

of NRC staff. Those that we regulate depend on the NRC to have the ability to develop technically sound, risk-informed rules, to make sound licensing decisions without undue delay, and to conduct fair and meaningful oversight of licensee operations. The public depends on our ability to reach independent judgments on safety. To carry out these capabilities we must have top quality engineers and scientists. While the current NRC staff is highly qualified and technically proficient, we are faced with an aging demographic profile among our engineers and scientists. To address this challenge, we are developing a human capital management plan to ensure we maintain our human capital.

Of course, we continue to operate the regulatory programs which have been so successful in carrying out our mission. This can be seen by the fact that we have achieved all of our safety goals since we began reporting them in 1997 as part of the Government Performance and Results Act.

NRC Programs

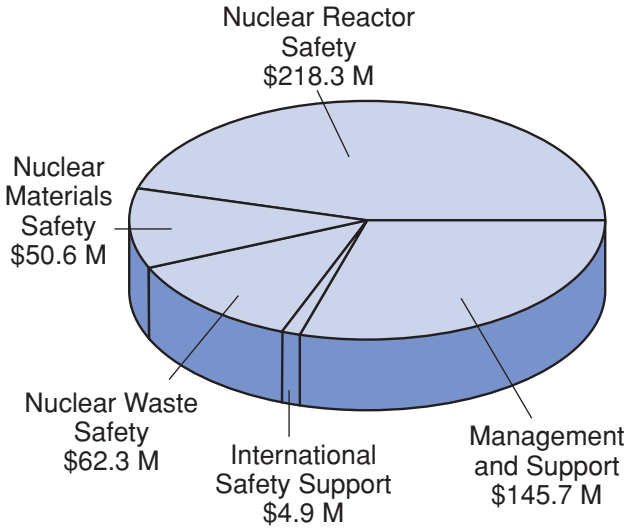
The NRC has aligned its programs into four operating arenas to sharpen our focus on the discrete areas covered by our regulatory mission. These are: Nuclear Reactor Safety arena, Nuclear Materials Safety arena, Nuclear Waste Safety arena, and International Nuclear Safety Support arena. NRC also has a corporate management and support function which includes information technology, financial management, human resources and policy development that provide essential resources and capabilities to accomplish our operational missions.

Our total budget was $487.3 million in FY 2001. The NRC is a fee-based agency which gets over 90 percent of its funding from fees paid by the industry. The following charts show the distribution of our resources among the four safety arenas and the management and support arena.

Readers are encouraged to visit our web site at www.nrc.gov to learn more about who we are and what we do to serve the American people. The NRC brought down its web site in early October 2001, in response to the events of September 11, 2001. A thorough review of all material previously on the website is being conducted to ensure that information that might be of clear benefit to a terrorist is not made available. The site is being brought back incrementally as this review is being completed. The expectation is that the vast preponderance of information previously available will be available in the coming months.

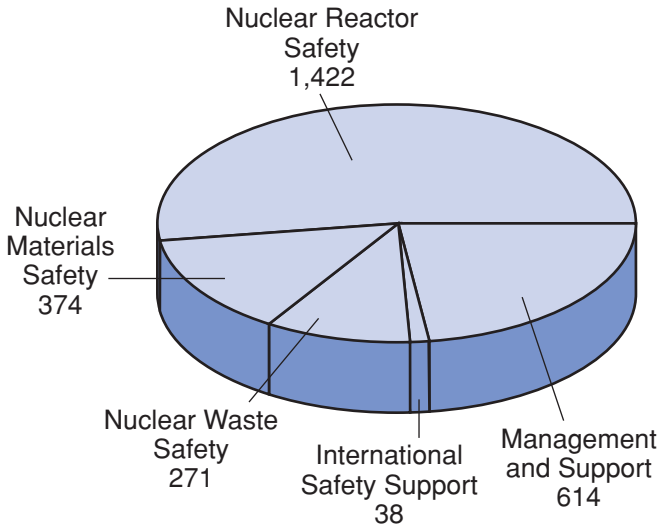
FY 2001 Budget Authority by Program (Millions of Dollars)

Total Funding was $487.3 Million



Note: Chart does not include $5.5 million for funding the Office of the Inspector General.

FY 2001 Distribution of Employees by Program Total FTE: 2,763



Note: Chart does not include the 44 FTE for the Office of the Inspector General.

Chapter II: Management's Discussion And Analysis*

About the NRC

The NRC was established by the U.S. Congress on January 19, 1975, as an independent Federal Government agency to regulate various commercial and institutional uses of nuclear energy. The agency has assumed the Atomic Energy Commission's regulatory function to develop and regulate nuclear activities. The NRC's purpose is defined by the Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974, as amended. These Acts provide the foundation for regulating the nation's civilian use of nuclear materials.

To fulfill the NRC's responsibility to protect the public health and safety, the agency 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 other uses of nuclear materials to ensure compliance with regulatory requirements. These regulatory functions relate to both nuclear power plants and other uses of nuclear materials, such as nuclear medicine, academic activities, research work, and industrial applications.

Organization

The top leadership of the NRC consists of a five member Commission. The President nominates members to serve 5 year terms with the consent of the U.S. Senate and designates one member as Chairman. 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.

Approximately 2,800 staff members carried out the agency's mission for FYs 2001 and 2000 utilizing a budget of approximately $487.3 million for FY 2001 and $469.9 million for FY 2000. The NRC recovered the majority of its budget from license fees.

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

Program Performance Highlights

The Government Performance and Results Act (GPRA) requires Federal agencies to provide an annual performance plan to Congress, setting goals with measurable target levels of performance.

* Management's Discussion and Analysis is a high-level overview of the Nuclear Regulatory Commission. It consists of five sections: About the NRC, describes the agency's mission and organizational structure; Program Performance, discusses the agency's success in achieving its strategic goals; Financial Performance, provides highlights of the financial statements and NRC's financial position; Financial Condition of the NRC, provides an overview of sources and uses of funds, prompt payment, and debt collection; and Systems, Controls, and Legal Compliance, describes the agency's internal control environment, contains the Chairman's statement regarding the agency's compliance with the Federal Managers' Financial Integrity Act of 1982, and the results of the Chairman's determination regarding the agency's compliance with the Federal Financial Management Improvement Act of 1996.

STRATEGIC GOALS

- Prevent radiation-related deaths and illnesses, promote the common defense and security, and protect the environment in the use of civilian nuclear reactors.
- 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.
- 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.
- Support U.S. interests in the safe and secure use of nuclear materials and in nuclear non-proliferation.

The NRC evaluates its program performance by using a structured strategic planning process. As such, 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.

The goal of the first arena, Nuclear Reactor Safety, is to ensure that civilian nuclear power reactors, as well as non-power reactors, are operated in a manner that adequately protects public health and safety and the environment. The NRC regulates 104 civilian nuclear power reactors and 36 non-power reactors. During FYs 2001 and 2000, 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. To date, the NRC has approved 64 requests from licensees to increase the electrical generating capacity of their nuclear reactor power plants (power uprates). Approval of uprates has resulted in an electrical generating capacity gain equivalent to approximately two large nuclear power plants.

The goal of the second strategic arena, Nuclear Materials Safety, is to ensure that NRC-regulated activities associated with the use of source, byproduct, and special nuclear materials are conducted in a manner that protects the public health and safety, the environment, and promotes the common defense and security. This arena includes regulatory oversight for 47 fuel facilities, including eight major fuel cycle facilities and two gaseous diffusion plants. It also includes oversight of more than 20,000 specific licenses regulated by the NRC and the Agreement States. During FYs 2001 and 2000, 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 to construct a mixed oxide fuel fabrication facility at the Department of Energy's Savannah River site near Aiken, South Carolina. The proposed use of mixed oxide fuel is part of the national non-proliferation effort to dispose of surplus weapons grade plutonium by utilizing it in existing commercial light water reactors. The NRC performed an acceptance review of the application and announced an opportunity for a hearing. Also, three public meetings were conducted at various locations near the proposed site to obtain public opinion on the scope of the proposed environmental impact statement for the license application review.

The goal of the third strategic arena, Nuclear Waste Safety, is to prevent adverse impacts from radioactive waste to current and future public health and safety, the environment, and to 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 2000, the NRC met all four of its strategic goal measures for this arena.

One of the NRC's major accomplishments in the high-level waste program in FY 2001 was the approval of the final regulations for 10 Code of Federal Regulations (CFR) Part 63, providing site-specific criteria for use in a possible licensing decision on a potential waste repository at Yucca Mountain, Nevada. The NRC also reviewed the U.S. Department of Energy's (DOE) Supplemental Draft Environmental Impact Statement for the Yucca Mountain repository. The agency continued technical exchanges with DOE on key licensing issues pertaining to the potential high-level waste repository and also to resolve DOE sub-issues and NRC concerns.

Also during FY 2001, the NRC completed the review of the Trojan Nuclear Plant License Termination Plan. This was a multi-year effort resulting in the first NRC approval of a License Termination Plan submitted in accordance with the NRC's reactor regulation. The NRC also completed its evaluation of previously terminated licenses to determine if the facilities had been adequately decontaminated prior to license termination.

The goal of the fourth strategic arena, International Nuclear Safety Support, is to support U.S. interests abroad in the safe and secure use of nuclear materials and in nuclear non-proliferation. 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 2000.

During FY 2001, the NRC completed action on a proposed export of highly enriched uranium to Canada for use as target material for medical isotope production. The agency 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.

The NRC also conducted bilateral assistance activities for nuclear safety and safeguards with Russia, Ukraine, Armenia, Kazakhstan, and countries of Central and Eastern Europe in close coordination with the Departments of State and Energy. Of particular note, the NRC participated in the safe shutdown and decommissioning of the BN-350 sodium-cooled fast breeder reactor near Aktau, Kazakhstan; the closure of the Chernobyl nuclear power plant in Ukraine; and proposals to limit Russia's long-term production of weapons-grade plutonium. The NRC negotiated with appropriate foreign counterparts four bilateral exchange agreements in FY 2001 to ensure an effective framework for the NRC's international exchanges is in place.

Financial Performance

As of September 30, 2001, and 2000, the financial condition of the NRC was sound with sufficient funds to meet program needs and adequate control of these funds in place to ensure NRC obligations do 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. 97-01, *Form and Content of Agency Financial Statements*, as amended, and applicable sections of OMB Bulletin No. 01-09.

Audit Results

The NRC received an unqualified audit opinion on its FY 2001 financial statements. This was the eighth consecutive year the NRC received an unqualified opinion. For FY 2001, the auditors identified two material internal control weaknesses: incomplete implementation of SFFAS Number 10 (SFFAS 10), Accounting for Internal Use Software, and, SFFAS Number 4 (SFFAS 4), Managerial Cost Accounting Concepts and Standards for the Federal Government. These two

weaknesses were also identified as being non-compliant with the Federal Financial Management Improvement Act (FFMIA) of 1996. In FY 2000, the auditors also identified management controls over license fee development as a material weakness. Because improved quality control procedures over fee development were instituted during FY 2001, the auditors closed the finding.

The auditors also identified two new reportable conditions for FY 2001 concerning contract close-out processing procedures and compliance with computer software accountability. In addition, nine reportable conditions were carried over from FY 2000. Four of these nine reportable conditions remained open at the end of FY 2001. These four include the incomplete implementation of managerial cost accounting, lack of a tested business continuity plan for the core accounting system, inadequate controls over the verification of small entity status for fee assessment, and development of the hourly rate for fees. The lack of a tested business continuity plan for the core accounting system was also identified as being non-compliant with FFMIA. The agency has taken action on these audit findings and expects to fully implement corrective action during FY 2002.

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 a subsequent section of this report. Analysis of the principal statements follows:

Analysis of the Balance Sheet

The NRC's assets were approximately $236.9 million as of September 30, 2001. This is an increase of $11 million from the end of FY 2000, and is mainly due to an increase in Accounts Receivable resulting from mail delays and the late receipt of payments from licensees due to the September 11, 2001, terrorist attack on America. The assets reported in NRC's Balance Sheet are summarized in the accompanying table.

ASSET SUMMARY (in millions)

	FY 2001	FY 2000
Fund Balance with Treasury	$140.5	$138.7
Accounts Receivable, Net	51.4	44.0
Property, Plant, & Equipment, Net	43.8	41.9
Other	1.2	1.3
Total Assets	$236.9	$225.9

The Fund Balance with Treasury represents the NRC's largest asset of $140.5 million as of September 30, 2001, an increase of $1.8 million from the FY 2000 yearend balance. This balance accounts for approximately 60 percent of total assets and represents appropriated funds, collection of license fees, and other funds maintained at the U.S. Treasury to pay current liabilities.

Accounts Receivable, Net, as of September 30, 2001 was $51.4 million and includes an offsetting allowance for doubtful accounts of $3.1 million. This is a 17 percent increase over the FY 2000 yearend Accounts Receivable, Net, balance of $44.0 million. Accounts Receivable Due from the Public is $48.9 million, representing 21 percent of total assets.

The value of Property, Plant, and Equipment, Net, was $43.8 million, representing 18 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 10, Accounting for Internal Use Software, implemented on October 1, 2000.

The NRC's liabilities were $143.4 million as of September 30, 2001. The accompanying table shows an increase in total liabilities of $13.6 million from the FY 2000 yearend balance of

LIABILITIES SUMMARY (in millions)		
	FY 2001	FY 2000
Accounts Payable	$ 28.6	$ 26.5
Federal Employee Benefits	10.9	8.2
Other Liabilities	103.9	95.1
Total Liabilities	$143.4	$129.8

$129.8 million. This is mainly due to an increase of $7.4 million in the liability to the U.S. Treasury for assessed license fees, which, when collected, are used to offset NRC's appropriations. Of the agency's liabilities, $39.3 million were not covered by budgetary resources, which represents a $3.7 million increase over the balance as of September 30, 2000. 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 $93.5 million as of September 30, 2001. This is a decrease of $2.6 million from the FY 2000 yearend balance. The decrease is mainly the result of a $3.7 million

NET POSITION SUMMARY (in millions)		
	FY 2001	FY 2000
Unexpended Appropriations	$86.8	$87.0
Cumulative Results of Operations	6.7	9.1
Total Net Position	$93.5	$96.1

increase in future funding requirements needed to pay for accrued unfunded expenses. Unexpended appropriations is the amount of authority granted by Congress that has not been expended. Cumulative results of operations represent net results of operations since the NRC's inception.

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 statement allows for linking program performance under GPRA reporting to the cost of programs. The NRC's net cost of operations for the year ended September 30, 2001, was $50.6 million, which is an increase of $2.9 million over the FY 2000 net cost of $47.7 million. Net costs by strategic arena are shown in the accompanying table.

NET COST OF OPERATIONS (in millions)		
	FY 2001	FY 2000
Unexpended Appropriations	$86.8	$87.0
Nuclear Reactor Safety	$(57.8)	$(60.0)
Nuclear Materials Safety	29.4	29.0
Nuclear Waste Safety	67.4	65.8
International Nuclear Safety Support	11.6	12.9
Net Cost of Operations	$50.6	$47.7

Total exchange revenue for the year ended September 30, 2001, was $464.0 million, which is an increase of $1 million over the exchange revenue of $463.0 million for the year ended September 30, 2000. Exchange revenue is derived from license fees and fees for inspections and other services, assessed in accordance with 10 CFR Parts 170 and 171.

The net cost of operations is expected to increase in the future due to changes in the statutory fee collection requirements and the addition of non-fee funds appropriated for new homeland

security activities. The requirement to recover approximately 100 percent of the agency's new budget authority by assessing fees, less amounts appropriated for the Nuclear Waste Fund and the General Fund, was reduced to 98 percent in FY 2001 and will continue to decrease two percent each year until FY 2005, for a total reduction of 10 percent.

Analysis of Statement of Changes in Net Position

The Statement of Changes in Net Position reports the net results of operations of $2.4 million as the difference between the NRC's financing sources from other than exchange revenue of $48.2 million and the net cost of operations of $50.6 million. At the end of FY 2001, appropriations used represented $31.0 million, or 64 percent, of the total financing sources from other than exchange revenue. This represents a $4.9 million increase from the FY 2000 yearend appropriations used balance of $26.1 million. The NRC's decrease in Net Position of $2.6 million from FY 2000 to FY 2001 represents the net results of operations of $2.4 million and the decrease in unexpended appropriations of $0.2 million.

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 2001, NRC had budgetary resources available of $532.2 million. The majority of which was derived from budget authority. This represents a three percent increase over FY 2000 budgetary resources available of $515.9 million.

For FY 2001, the status of budgetary resources showed obligations of $503.3 million, or 95 percent of funds available. This is comparable to FY 2000 obligations of $485.5 million, or 94 percent of funds available. Total outlays for FY 2001 were $487.0 million, which represents a $3.1 million increase from FY 2000 total outlays of $483.9 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 $503.3 million and reconciles to the net cost of operations of $50.6 million by deducting non-budgetary resources, costs not requiring resources, and financing sources yet to be provided.

Financial Condition of the NRC

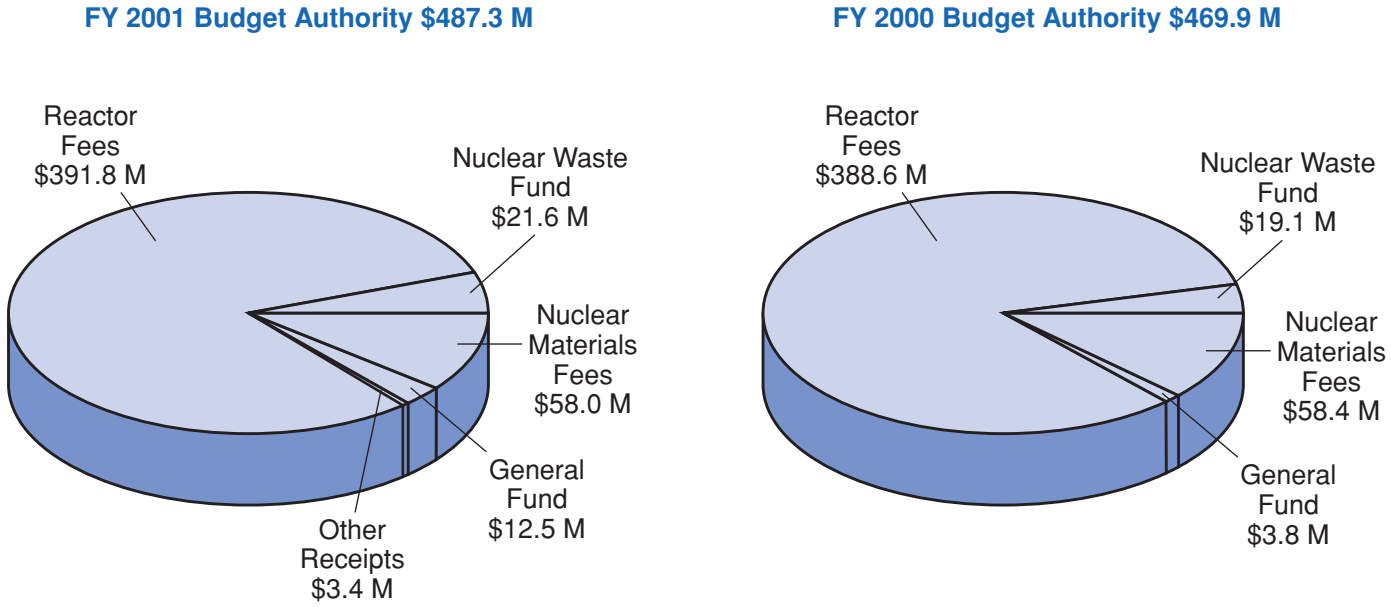
Sources of Funds

The NRC has two appropriations: NRC Salaries and Expenses Appropriation and the Office of the Inspector General Appropriation. Funds for both appropriations are available until expended. The NRC's total new FY 2001 budget authority was $487.2 million, $481.7 million for the Salaries and Expenses Appropriation and $5.5 million for the Office of the Inspector General Appropriation. This represents an overall increase in new budget authority of $17.3 million over FY 2000, $16.8 million for the Salaries and Expenses Appropriation, and $0.5 million for the Office of the Inspector General Appropriation. Additional funds available to obligate in FY 2001 were $32.6 million from prior-year appropriations, $2.5 million from prior-year reimbursable work, $4.8 million from current and prior-year transfer of funds from other Federal agencies, and $5.1 million for new reimbursable work to be performed for others. The sum of all funds

available to obligate for FY 2001 was $532.2 million, which is a $16.3 million increase over the FY 2000 amount of $515.9 million.

Consistent with the requirements of the Omnibus Budget Reconciliation Act of 1990, as amended, the NRC collected and offset approximately 98 percent of its new budget authority in FY 2001 and approximately 100 percent of its new budget authority in FY 2000, excluding funds derived from the Nuclear Waste Fund, General Fund, and other offsetting receipts. (See Figure 1.)

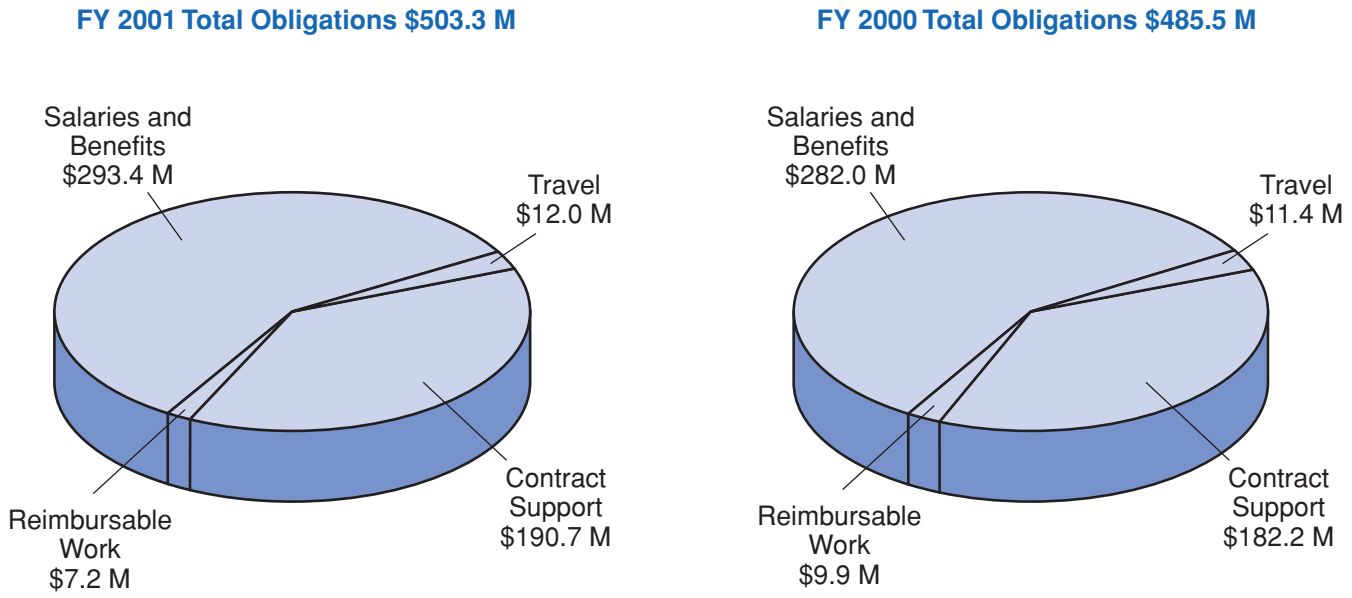
Figure 1
Sources of Funds



Uses of Funds by Function

As previously stated, the total budgetary resources available for use by the NRC in FY 2001 was $532.2 million. Of that amount, the NRC incurred obligations of $503.3 million, which was an increase of $17.8 million over FY 2000. Approximately 58 percent of obligations were used for salaries and benefits. The remaining 42 percent was used to obtain technical assistance for the NRC's principal regulatory programs, to conduct confirmatory safety research, to cover operating expenses, (e.g., building rentals, transportation, printing, security services, supplies, office automation, training), staff travel, and reimbursable work. (See Figure 2.) The unobligated budget authority available at the end of FY 2001 was $28.9 million which is a slight decrease over the FY 2000 amount of $30.4 million. Of the $28.9 million in budget authority that was not obligated in FY 2001, $0.6 million of transferred funds expired at the end of the fiscal year, $4.5 million was for reimbursable work, and $23.8 million in budget authority is available to fund critical needs in FY 2002.

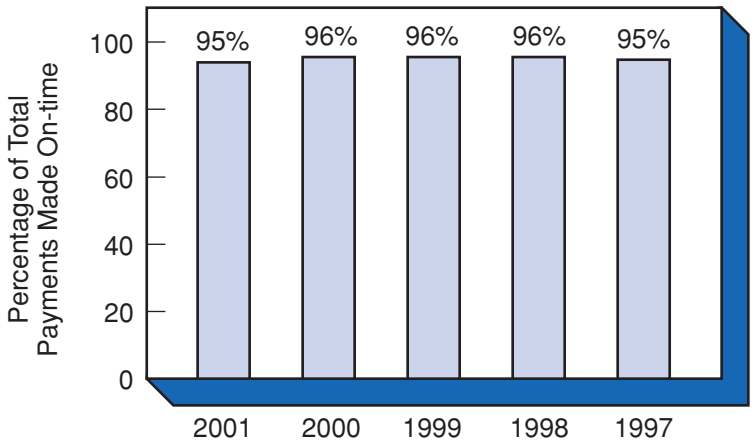
Figure 2
Uses of Funds by Function



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 2000 to FY 2001, the NRC had an increase of 508 invoices (from 8,237 to 8,745) that were paid and subject to the Prompt Payment Act. For FY 2001, the NRC made 95 percent of its payments on-time that were subject to the Prompt Payment Act. The amount of interest penalties incurred during FY 2001 were $3,151 which reflects a 51 percent decrease over the FY 2000 amount of $6,400. In addition, the agency made over 99 percent of its vendor payments electronically.

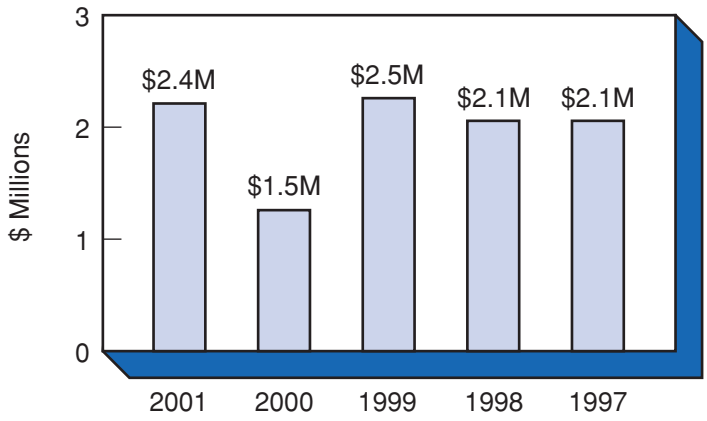
Figure 3
Prompt Payment



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 yearend 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 5 years. Delinquent debt at the end of FY 2001 was $2.4 million. This is an increase of $0.9 million over FY 2000; however, it reflects a decrease in the number of outstanding receivables from 254 to 208. The increase in outstanding receivables is due to one licensee filing for bankruptcy ($0.5 million) and a delay in the receipt of some payments because of the disruption to certain financial networks caused by the September 11, 2001, terrorist attack on America. 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.

Figure 4
Delinquent Debt



Systems, Controls and Legal Compliance

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 Government-wide standards.

The Federal Financial Management Improvement Act of 1996 (Improvement Act) requires

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

CHAIRMAN

February 1, 2002

INTEGRITY ACT STATEMENT

The U.S. Nuclear Regulatory Commission evaluated its management controls and financial management systems for FY 2001, 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

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.

Management Controls

A committee of senior agency executives reviewed individual assurance statements prepared by NRC office directors and regional administrators that identified weaknesses and warranted the attention of the executive committee. This committee was 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 as advisors. These statements were based on various sources:

- 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.

The NRC's ongoing management control program requires, among other things, that management control deficiencies are integrated into offices' and regions' annual operating plans. The operating plan process has provisions for periodic updates and for attention from senior managers. The management control information in these plans, combined with the individual assurance statements discussed previously, provides the framework for monitoring and improving the agency's management controls on an ongoing basis. It also advises the Chairman of any management control deficiencies serious enough to report as a material weakness or material noncompliance.

The NRC evaluated its management control systems for the fiscal year ending September 30, 2001. 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 accounting for internal use software (SFFAS 10) and managerial cost accounting (SFFAS 4) were identified as significant weaknesses that merit the attention of senior management.

Governmentwide requirements for accounting for internal use software (SFFAS 10) became effective on October 1, 2000. The NRC did not have an adequate system to track labor hours, and staff did not comply with agencywide implementation guidance. In FY 2002, the NRC will implement a new time and labor reporting system in order to resolve the system weakness. In addition, the NRC will continue to monitor the reporting of labor time for internal use software development projects to ensure compliance with established agency procedures and SFFAS 10.

The incomplete implementation of managerial cost accounting was reported as a significant weakness last year and continues to receive the close attention of senior management. Progress has been made over the past year to implement managerial cost accounting. During FY 2001, quarterly cost reports were developed and provided to agency managers as an initial step to implement cost accounting. Cost accounting

software was configured to reflect how the agency plans to report direct costs and allocate its indirect costs. Consistent with the remediation plan, the agency expects to fully implement managerial cost accounting and achieve full compliance with SFFAS 4 during FY 2002.

Financial Management Systems

The NRC has five financial systems: the Federal Financial System (FFS), Capitalized Property System, License Fee Bill Generator System, Allotment/Financial Plan System, and a Budget Formulation System. For FYs 2001 and 2000, the NRC also had a mixed system - the Payroll/Personnel System. The NRC evaluated its financial management systems to determine if they comply with Governmentwide standards, as required by the Integrity Act (Section 4), and with applicable Federal requirements and accounting standards required by the Improvement Act. This evaluation disclosed that NRC's major financial management systems are in compliance with the Integrity Act.

However, the Chairman also determined that the NRC had three instances of substantial non-compliance with the Improvement Act. Reporting for internal use software development represents an instance of substantial non-compliance because the process did not comply with Federal financial management systems requirements and with the standard general ledger at the transaction level. The NRC expects to implement remediation actions required by the Improvement Act during the first quarter of FY 2002.

The NRC's financial management systems complied substantially with Federal financial management systems requirements and the standard general ledger at the transaction level, but did not comply substantially with applicable Federal standards due to the lack of implementation of SFFAS 4, managerial cost accounting. As discussed previously, the agency continues to address the implementation of SFFAS 4 and expects to complete implementation during FY 2002.

The third instance of substantial non-compliance with the Improvement Act relates to FFS business continuity testing. The FFS is the core accounting system that the NRC uses through an interagency agreement with the Department of the Treasury (Treasury). This system is reviewed annually by Treasury's Financial Management Service (FMS) for its client agencies that utilize the system. FMS performed a vulnerability assessment that disclosed no material or nonmaterial weaknesses. However, FMS has not tested its business continuity plan for FFS because they plan to terminate the cross-servicing agreement at the end of FY 2002. The NRC expects to complete the transition of its cross-servicing of the core accounting system to the National Business Center of the Department of the Interior during FY 2002.

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 2000 and FY 2001, 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. The most recent changes to the license, inspection, and annual fees are described in the Federal Register (66 FR 32452, June 14, 2001). 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 and inspection fees based on average number of hours. Reviews of other types of fees concluded that fee revisions were not warranted at this time.

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 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.

Chapter III: Program Performance

Measuring and Reporting Our Performance

This report presents information on our performance during FY 2001. Our discussion is centered around each of the four operating arenas: Nuclear Reactor Safety, Nuclear Materials Safety, Nuclear Waste Safety, and International Nuclear Safety Support. We also have a section devoted to our achievements and challenges in Corporate Management and Support. We discuss our implementation of initiatives in support of the President's Management Agenda under Corporate Management and Support.

In each arena discussion we provide a brief overview of our key programs, discuss our key accomplishments, present our performance results, provide budget information for the arena, and summarize the results of our program evaluations completed in FY 2001.

Our Performance Measurement System

The NRC has adopted a performance measurement system which has 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.

NRC performance goals are the key contributors to achieving the strategic goals and focus on outcomes. The performance measures indicate how effectively the NRC is achieving its performance goals and establish the basis for performance management. Not achieving a performance measure may not result in missing our strategic goal, but it would signal NRC managers that their programs need to be reevaluated to determine the cause of the failure. The measures also establish how far and how fast the agency will move in the direction established by the performance goals.

New Performance Measures for FY 2001

The NRC added three new performance goals for each arena for FY 2001:

(1) increase public confidence,

(2) make NRC activities and decisions more effective, efficient, and realistic, and

(3) reduce unnecessary burden on stakeholders.

While the goal of maintaining safety remains paramount to the Commission, these three additional performance goals focus on the impact our regulatory processes and decisions have on our stakeholders. Thus, the Commission must ensure that stakeholders' interests and concerns are considered and addressed.

These three new performance goals have some performance measures that are still being developed, and in some cases have milestones.

Increasing Public Confidence

Maintaining and building trust and confidence that the NRC is carrying out its mission is an important goal of the agency. The NRC strives to ensure that our stakeholders are provided with clear and accurate information about our regulatory programs. We also ensure that stakeholders have the opportunity to participate in our regulatory processes.

Making NRC Activities and Decisions More Effective, Efficient, and Realistic

The costs of most NRC activities and decisions contribute to our licensee's costs and are ultimately borne by the public. The electric

industry is in a transition from a rate-regulated to a more market-based business environment. The NRC must keep its regulatory costs reasonable and predictable.

Reducing Unnecessary Burden on Stakeholders

Reducing unnecessary regulatory burden will enable more efficient use of both licensee and NRC resources. During the past thirty years a vast amount of technical knowledge and operational experience has been accumulated on the safe operation of nuclear plants. This knowledge allows the NRC to refine and enhance its regulatory programs and technical requirements to reduce unnecessary regulatory burden while assuring the maintenance of safety. For example, recent risk-informed initiatives for inspection and testing provide the basis for reallocating resources from lower risk-significant systems to higher risk-significant systems and components.

Nuclear Reactor Safety

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 non-power 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 civilian nuclear power reactors and 36 non-power reactors. Research and test (Non-power) reactors are nuclear reactors whose primary function is to safely conduct research and development. Almost every field of science; including physics, chemistry and biology, use these reactors.

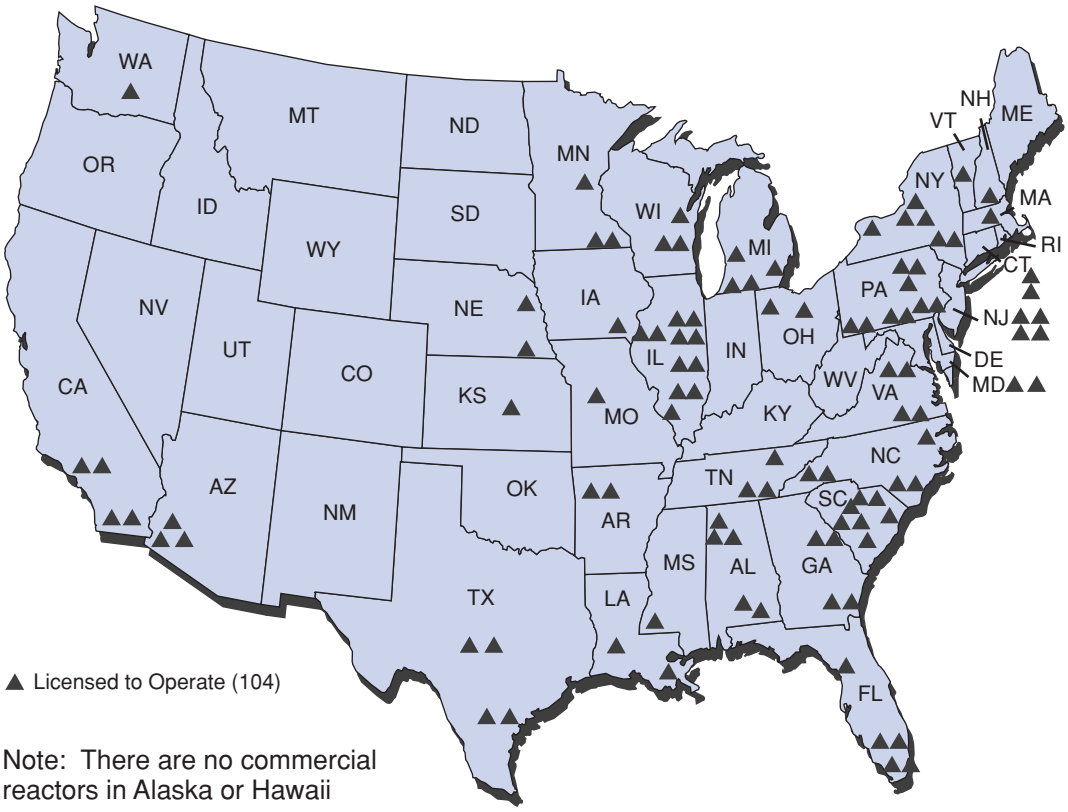
Reasonable assurance of adequate protection of the public health and safety is, as a general matter, defined by the Commission's health and safety regulations themselves. That is, unless otherwise provided, there is reasonable assurance of adequate protection of public health and safety when the applicant or licensee demonstrates compliance with the Commission's regulations. The regulations were established using defense-in-depth principles and conservative practices that provide an additional margin of safety.

The collective efforts of the NRC and the nuclear industry are needed to maintain safety. The NRC licensees have the responsibility to safely design, construct, and operate civilian nuclear reactors. Regulatory oversight of licensee safety is the responsibility of the NRC. Thus, safe performance reflects the results of the collective efforts of the NRC and the nuclear industry.

Ensuring the Safe Operation of Nuclear Reactors

The NRC ensures the safe operation of nuclear reactors by licensing nuclear power plants and their operators, providing oversight of plant operating performance, maintaining an emergency response program, establishing clear health and safety regulations to follow, and conducting research to resolve safety issues and provide support for developing technical regulations. The Nuclear Reactor Safety Arena consists of several programs which work together to achieve our

U.S. Commercial Reactors



Note: There are no commercial reactors in Alaska or Hawaii

safety goal. The licensing of nuclear plants requires that licensees follow regulations specifying how plants are to be designed, constructed and operated safely. It provides the basis for safe operations. The NRC provides independent oversight of the plants through its reactor oversight process to verify that they are being operated safely in accordance with NRC rules and regulations. If violations are found, enforcement actions may be taken. The emergency response program ensures that public safety measures are in place in the event an accident occurs. The research program analyzes data from operations and independently undertakes studies which provide the basis for maintaining the safety of nuclear power plants. The following sections describe our safety programs in greater detail.

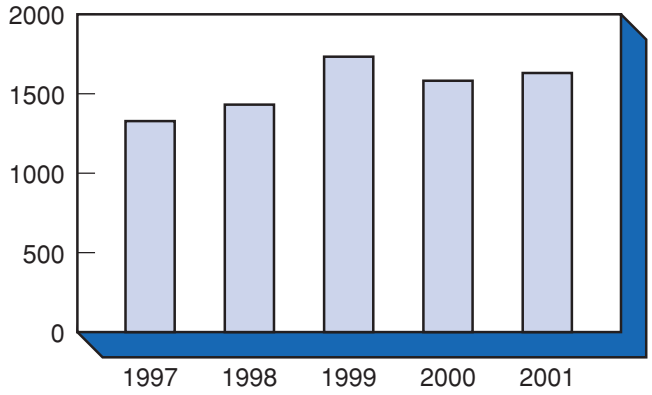
Licensing

The reactor licensing program ensures that operating nuclear power plants maintain adequate levels of protection of public health and safety in the operation of the plant throughout its life. This includes assurances that facilities are adequately designed, properly constructed, 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 our safety regulations and guidance.

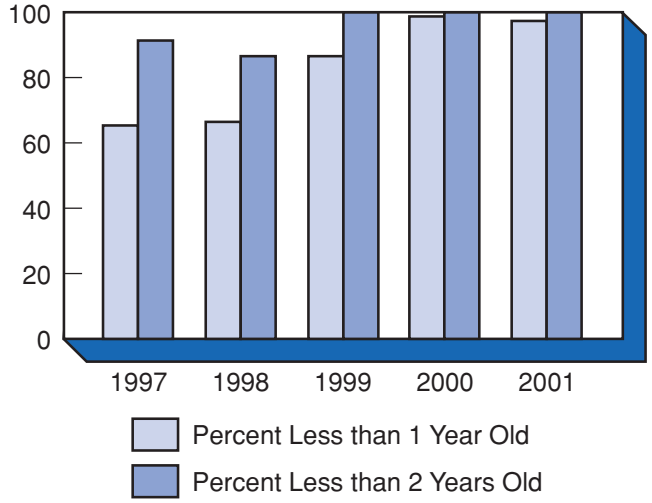
We met or exceeded established measures for completing nuclear power plant licensing-related actions. The NRC staff completed 1,617 licensing actions in FY 2001 (see graph below).

Licensing Actions Completed



We have improved our timeliness in responding to license requests since 1997. In 1997, 72 percent of licensee actions were handled within one year or less. In FY 2001, we completed 97 percent of licensing actions within one year (see graph below).

Licensing Action Age



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.

Licensees have been applying for and implementing power uprates since the 1970s as a way to increase the power output of their plants. The NRC has been conducting power uprate reviews since then and, as of October 1, 2001, has completed 64 such reviews. Approximately 7600 MWt (2530 MWe) or an equivalent of about two large nuclear power plant units has been gained through implementation of power uprates at existing plants. In FY 2001, the NRC completed reviews for power uprates at 16 units. These resulted in an increase in electrical generating capacity of about 450 megawatts.

Power uprate reviews are complex. Areas covered in power uprate reviews include reactor core and fuel performance, reactor coolant system, containment performance, emergency core cooling systems performance, loss of coolant accidents, special events, limiting operational transients, radiological consequences, system and component capabilities, instrumentation and controls, electrical power and environmental qualification, human performance and operator response.

The NRC engaged in significant financial review activities for nuclear power reactors as a result of a number of States taking 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 seperate holding company. The NRC has established an ambitious six-month target for completing license transfer actions and has met that target in all cases.

With increasing interest on the part of the nuclear industry in future reactors, the NRC has

assigned staff to work on new reactor licensing activities, including pre-application reviews for the AP 1000 advanced reactor design and the pebble bed modular reactor.

License Renewal

The Reactor License Renewal program establishes the technical and regulatory requirements for renewal of power plant licenses. Reactor operating licenses were originally issued for 40 years and are allowed to 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 bases is maintained for the period of extended 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 effects of aging, with the purpose of ensuring safety for the duration of the extended license.

Our license renewal review program is proceeding aggressively: three plants, totaling six units, have received renewed licenses, as of the end of FY 2001; and seven plants, totaling fourteen units were under review at the end of FY 2001 (see graph at right). We expect that almost all of the plants in the U. S. will ultimately apply to renew their licenses.

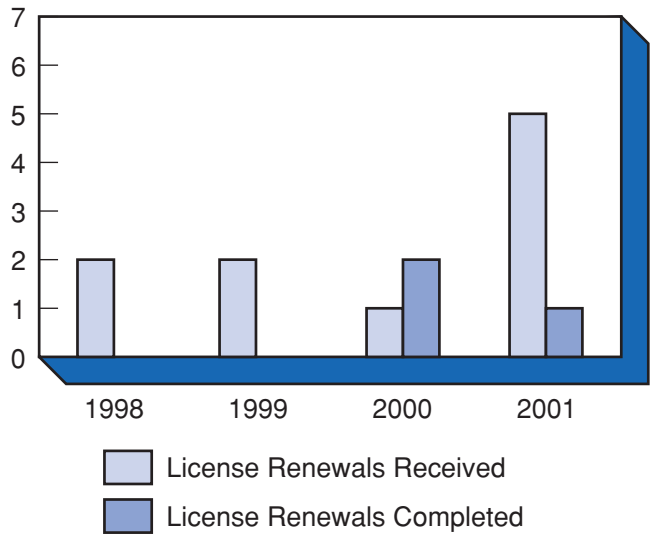
The NRC met or exceeded all established schedules for license renewal activities in FY 2001. The renewed license for Arkansas Nuclear One, Unit 1, was issued in June 2001.

Reactor Inspection and Performance Assessment Program

The NRC provides oversight of plants through its reactor oversight process (ROP) to verify that they 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 actions, 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 to safety. The ROP recognizes that issues of very low safety significance inevitably occur and licensees are expected to effectively address these issues. The NRC performs a baseline level of inspections at each plant. The NRC may perform supplemental inspections and take additional actions as necessary to ensure significant issues are addressed. 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 the NRC's web site. This information has not been available since late September 2001. We expect it to be posted on the NRC's web site shortly. The NRC also conducts public meetings with licensees to discuss the results of the ROP assessments

License Renewal Applications



On Site inspection

NRC inspectors spend over 3,000 hours per year inspecting a typical nuclear reactor plant. Resident inspectors, located at each site, provide the NRC's major on-site presence and carry out a significant part of the inspection program. Their primary role is to observe, evaluate, and verify the adequacy of licensee nuclear safety activities. This is accomplished by inspecting licensee performance in operating activities and responses to events.

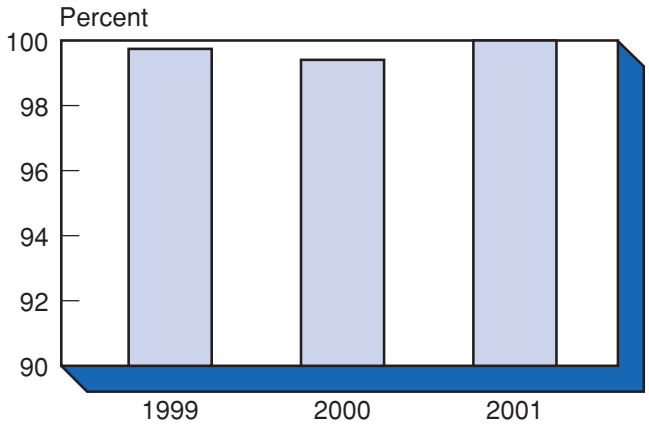
The NRC completed the first year of implementation of its revised ROP in April 2001. Key features of the revised process include a risk-informed regulatory framework, risk-informed inspections, a significance determination process to evaluate inspection findings, licensee-reported performance indicator information, and streamlined assessment and enforcement activities. These process improvements were developed in response to NRC staff assessments, Commission direction, and external stakeholder comments and are intended to be more risk-informed, objective, and predictable while being more understandable and accessible to its stakeholders than the previous oversight process. The revised ROP more effectively maintains safety by focusing staff and industry attention on risk-significant activities while reducing unnecessary regulatory burden on its licensees.

Reactor Incident Response

Reactor incident response activities are conducted to ensure that safety-significant operational events involving nuclear power reactors are investigated in a timely, systematic, and technically sound manner. In addition, information is obtained on the causes of the events so that the NRC can make timely and effective corrective actions.

Emergency response activities are also conducted to ensure NRC is prepared to carry out its role in a radiological emergency. This includes maintaining an emergency telecommunications system, Emergency Response Data System, and an Operations Center Information Management System. Our Emergency Response Performance Index is an overall measure of the degree to which the agency believes it is ready to respond to an emergency situation (see graph below). This index stood at 100 percent in FY 2001.

Emergency Response Performance Index



Safety Research

Our research program conducts independent experiments and analysis, develops the technical basis to support realistic safety decisions, and prepares the agency for the future by evaluating safety issues involving current and new designs and technologies. The reactor safety research program issued 41 research products that responded to high- and medium-priority needs of the Commission in FY 2001. These products include regulatory guides, technical reports, assessments, and research studies.

The research program includes the following key areas:

Risk Analysis

Work is underway to apply risk assessment methods and analysis to improve NRC's regulations. In FY2001, work was completed supporting a recommendation to modify the current

regulations for emergency core cooling systems. In addition, risk assessment methods are used to analyze operational data and events to help focus NRC attention on the most important activities.

Fuel and Thermal-Hydraulic Research

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. Much of the work is co-funded with the international community and with industry, hence achieving significant efficiencies.

NRC has an extensive thermal-hydraulic program of model development and validation. The application of these models provides the technical basis for risk informing the regulations, and addressing safety issues. Analysis of hydrogen generation during a severe accident using NRC developed severe accident models provides the technical basis for risk informing combustible gas requirements, while analysis of small and large break loss of coolant accidents provides the basis for ongoing work to risk inform the Emergency Core Cooling System Rule (10 CFR 50.46).

Structural Integrity Research

The ability of structures, components and systems 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 as these effects degrade the material and strength properties and may reduce the available safety margins. These projects include evaluations of methods for non-destructive examination to identify potential degradations, methods for conditional assessment, degradation mechanisms, methods to evaluate performance of degraded components, and methods to repair and mitigate the potential unsafe conditions. This research has been a key factor in developing regulatory strategies to address the aging effects, including cracking of steam generator tubes, piping systems, and the reactor pressure vessel head penetrations.

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

New Reactors

With increasing interest on the part of the nuclear industry in future reactors, research activities have been initiated to respond to requests for pre-application interactions on advanced light water reactor designs and the pebble bed modular reactor and another high temperature gas-cooled reactor. This has involved activities to identify the safety issues and research needs for the advanced designs, and development of the necessary infrastructure (e.g., computer codes) to support the licensing reviews.

Performance Results

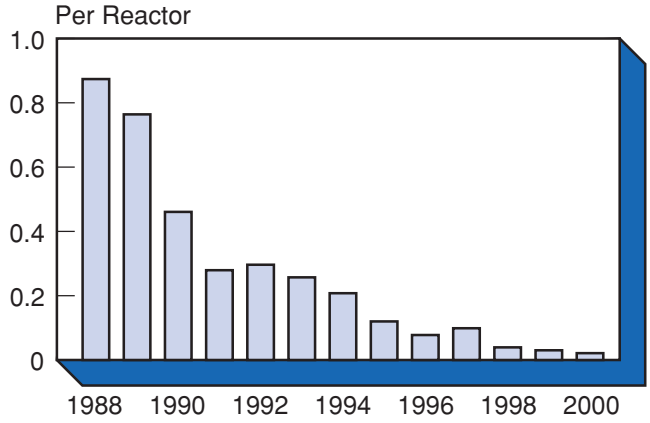
The ultimate test of our programs in the nuclear reactor safety arena is the continued safe operation of nuclear power plants. In addition to monitoring the performance of individual plants, the NRC compiles data on overall performance using several industry-level performance indicators, some of which are included below. These indicators show significant improvement in performance over the past decade.

Industry Safety Performance Record

Several industry indicators of safety performance show significant improvement over the past 13 years. One such indicator is significant operating events. Significant events are those events that meet specific criteria, such as degrada-

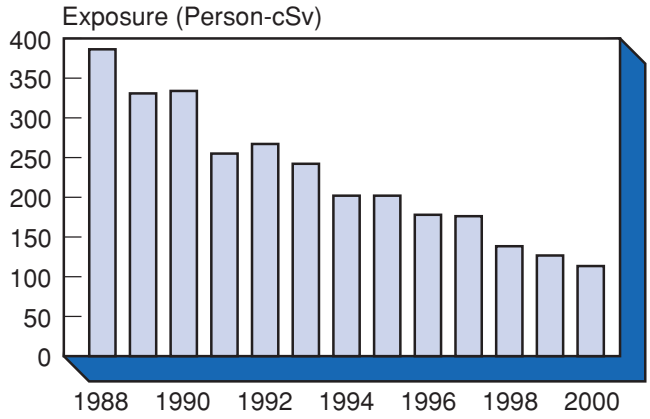
tion of important safety equipment. The NRC staff reviews operating events and assesses their safety significance. The number of significant events has declined steadily over the past decade (see graph below).

Significant Events



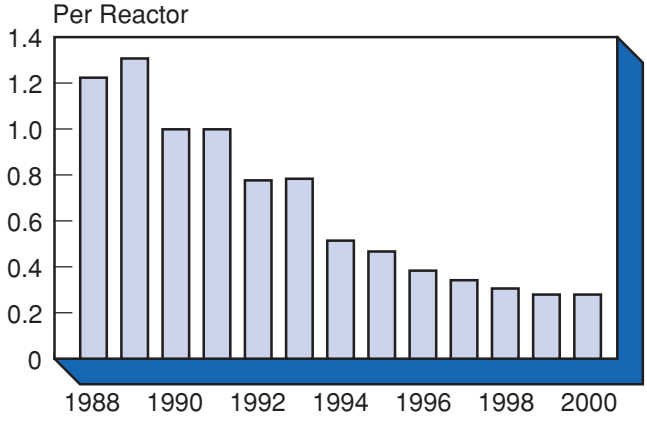
The total radiation dose received by workers at nuclear plants is an indicator of the effectiveness of personnel radiation exposure controls. Worker radiation dose has been reduced significantly over the past decade (see graph below). In addition, there have been no deaths or injuries from radiation exposure during that time, or at any time in the history of the U.S. commercial nuclear power industry.

Collective Radiation Exposure



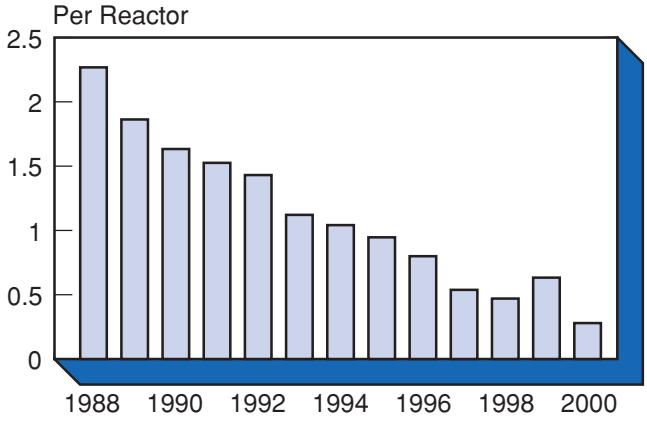
Safety systems mitigate off-normal events by providing reactor core cooling and water addition. Actuations of safety systems that are monitored include certain emergency core cooling and emergency electrical power systems. Actuations can result from issues such as testing errors or actual demands. The number of safety system actuations has declined over the past decade (see graph below).

Safety Systems Actuations



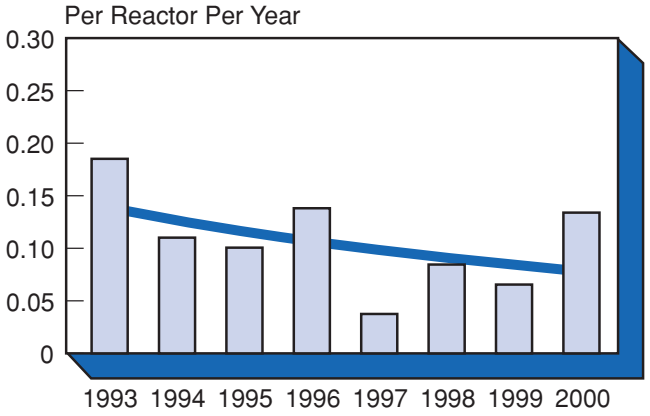
A scram is a basic reactor protection safety function that shuts down the reactor by inserting control rods into the reactor core. Scrams can result from events that range from relatively minor incidents to precursors of accidents. The number of unplanned scrams has declined steadily over the past decade (see graph below).

Automatic Scrams



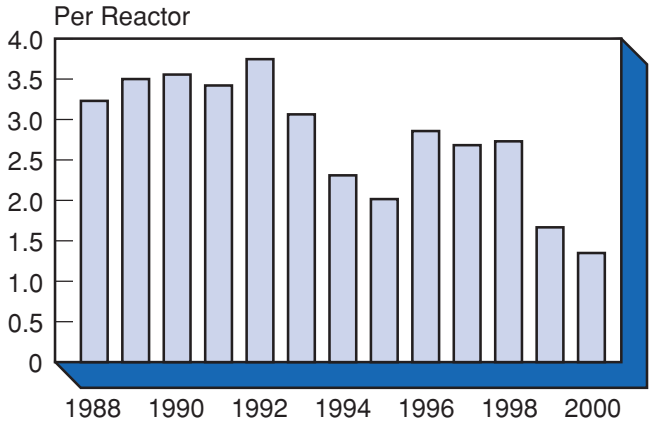
The NRC staff assesses the risk significance of events at plants. A precursor event is an event that has a probability of greater than 1 in a million or greater of leading to substantial damage to the reactor fuel. The occurrence rate of precursor events during the 1993-2000 period has generally been declining (see graph below). A "significant" precursor event has a probability of 1 in a thousand or greater of leading to substantial damage to the reactor fuel. No "significant" precursor events have been identified since 1996.

Precursor Occurrence Rate



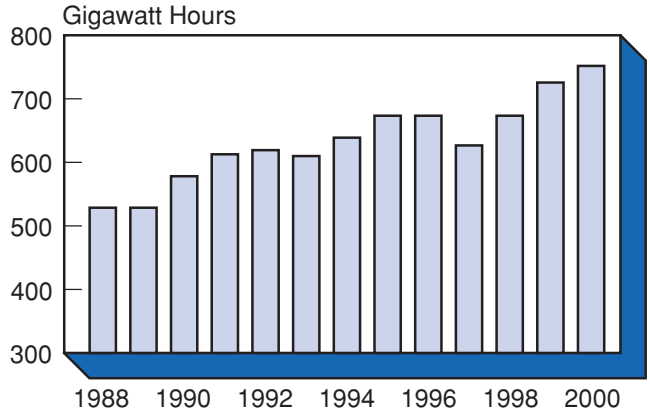
Safety system failures are any events or conditions that could prevent the fulfillment of the safety function of the safety systems. The number of safety system failures has also declined over the past decade (see graph below).

Safety System Failures



These improvements in safety have occurred at a time when nuclear power generation has increased significantly, increasing 43 percent from 527,000 gigawatt hours in 1988 to 754,000 gigawatt hours in 2000 (see graph below).

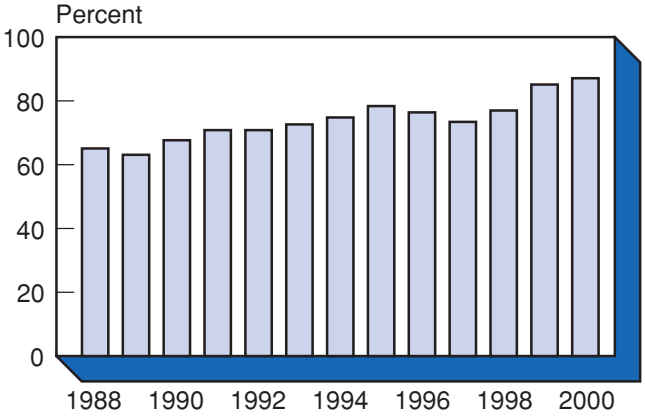
Nuclear Power Generation



Source: DOE/EIA Monthly Energy Review

The average annual capacity factor has increased from 65 percent in 1988 to 88 percent in 2000 (see graph below).

Average Capacity Factor



Source: DOE/EIA Monthly Energy Review

The NRC's Role in Improving Safety

The improvement in the safety record of nuclear power plants has been a result of the combined efforts of licensees and the NRC. Both licensees and the NRC have gained experience in the operation and maintenance of nuclear power facilities.

Licensees have the primary role in maintaining safety. They are expected to design and operate 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.

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.

Strategic and Performance 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.*

MEASURES

1. No nuclear reactor accidents.[1]
2. No deaths resulting from acute radiation exposures from nuclear reactors.[2]
3. No events at nuclear reactors resulting in significant radiation exposures.[3]
4. No radiological sabotages at nuclear reactors.[4]
5. No events that result in releases of radioactive material from nuclear reactors causing an adverse impact[5] on the environment.

RESULTS

All measures were met each year in FY 1997 through 2001.

The first measure tracks nuclear reactor accidents. Nuclear reactor accidents are those which result in substantial damage to the reactor fuel. The second and third measure indicate whether radiation-related deaths and illness are being prevented. The fourth measure tracks the security at nuclear reactor facilities against deliberate acts of sabotage. Radiation that is produced in the process of generating power from nuclear materials can also potentially harm the environment if not properly controlled. The fifth measure tracks releases to the environment that have an adverse impact. All of the targets for these measures have been met since 1997.

Performance Goals

In addition to our strategic goals, the NRC has four performance goals and measures for the nuclear reactor safety arena. The performance goals are:

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

Performance Goal Results

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

MEASURES

1. No statistically significant adverse industry trends in safety performance.[6]
2. No more than one event per year identified as a significant precursor of a nuclear accident.[7]
3. No events resulting in radiation over exposures from nuclear reactors that exceed applicable regulatory limits.[8]
4. No more than three releases per year to the environment of radioactive material from nuclear reactors that exceed the regulatory limits.[9]
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.[10]

RESULTS

All measures were met each year in FY 1997 through 2001.

The first measure tracks the trends of several key indicators of industry safety performance. The indicators provide insights on major areas of reactor performance, including reactor safety, radiation safety, and physical protection. Statistical analysis techniques are applied to each indicator to determine its long-term trend. Any indicator that shows degrading safety performance will result in not meeting our target for this measure. To date, there have been no statistically significant adverse trends in any of the indicators. The FY 2001 data is preliminary.

The second measure tracks significant precursor events. A "significant" precursor event is defined as an event that has a probability of 1/1000 or greater of leading to substantial damage to the reactor fuel. No precursor events have been identified since 1996. The FY 2001 data is preliminary.

The third measure tracks individual radiation over-exposures within any nuclear power plant. Radiation levels are tracked carefully within the plant, and this measure focuses on instances in which an individual is exposed to radiation levels which 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 2001 data is preliminary.

In addition to ensuring the safe operation within nuclear plants, the fourth measure tracks our performance goal to ensure that the environment is not harmed by radioactive releases from the generation of nuclear power. These releases can be in the water that is used for cooling within the plant or through vents to the atmosphere. Radioactivity releases to the environment are tracked using set regulatory limits. Any releases below these limits would not be expected to harm an individual or the environment. There have been no releases of nuclear material into the environment that exceed regulatory limits since 1997. The FY 2001 data is preliminary.

For the fifth measure, NRC regulations 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.

Performance Goal: *Increase public confidence.*

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
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

All measures were met in FY 2001.

The milestone for the first measure during FY 2001 was to conduct semi-annual evaluations of public meeting feedback forms. This milestone was met. The forms have been evaluated to determine their usefulness in assessing public confidence. NRC compiled and analyzed the results of all the feedback forms received from the public for the period March 31 to September 1, 2001. NRC has analyzed 182 public meeting feedback forms, representing 33 meetings. Trending information was included in the semi-annual evaluations. Most respondents (77 percent) indicated that they worked for an interest organization which includes: licensee, non-governmental organization, licensee contractor, law firms, local or state government, and community or citizens group. Seventy three percent of respondents were very familiar with the meeting topic prior to attending the meeting and 43 percent have attended more than five NRC meetings. Seventy five percent of the respondents were able to find all the supporting information they wanted prior to the meeting and 81percent indicated that attendees' questions were answered clearly, completely, and candidly. The Commission will use the results of the pilot to make a final determination regarding further use of the forms.

Holding public outreach meetings is a method to provide the public with information on NRC activities. For the second measure, all of the scheduled public outreach meetings were held and feedback from the public on revisions to the Reactor Oversight Process was analyzed. This feedback was very helpful and will be used as the Reactor Oversight Process is further improved.

The third measure concerns the agency's allegation program. This program provides a mechanism for workers in the industry and members of the general public to submit safety concerns directly to the NRC for evaluation and response. The NRC evaluates any concerns that are received by conducting inspections, investigations, or technical reviews. The individual that submitted the concerns is notified in writing of the results of the NRC's evaluation. The FY 2001 milestone for this measure was to start distributing a survey to stakeholders who have brought safety and non-compliance regulatory allegation issues to the NRC's attention. The purpose of the survey is to ascertain how NRC did in responding and addressing the allegers issues. The survey results are currently being analyzed.

The fourth measure assesses the extent to which Directors' decisions are being handled expeditiously. Any member of the public can submit a petition under 10 CFR 2.206, 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. It is signed by the cognizant Office Director. Details on the process are in MD 8.11. Director's Decisions were issued within an average of 120 days, which met our target.

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

MEASURES	RESULTS
1. Complete those 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 renewals application reviews within 30 months.	All measures were met in FY 2001.

The first measure focuses on progress in developing a coordinated approach to implementing risk-informed decisions throughout the agency's regulatory processes. The milestones towards developing a risk-informed regulation implementation plan (RIP-IP) were completed on schedule. These included sending the RIP-IP to the Commission and briefing them on the contents (October-November 2000) and developing final criteria and milestones for Commission approval (August 2001).

The second measure shows steps taken to improve our internal processes. This year we implemented two process improvements in the nuclear reactor safety arena: revisions to the reactor oversight process and revisions to the 10 CFR 2.206 petition process. Process improvements brought about by the revised reactor oversight process are discussed extensively in the program evaluation section of this chapter. The 10 CFR 2.206 petition process allows for written requests to be filed by any person to institute a proceeding to modify, suspend, or revoke a license or any other enforcement action. These process improvements enhance public communication, provide more avenues for stakeholder feedback, and improve clarity to the process.

The third measure puts a target on license renewal reviews to ensure they are handled expeditiously while performing a comprehensive evaluation of the renewal application. Guidance documents were issued in FY 2001 to improve the effectiveness and efficiency of this process. We completed one license renewal in FY 2001. That renewal was completed within 17 months, well within the 30 month target. We plan to improve our license renewal process to use fewer resources and complete license reviews in 24 months.

Performance Goal: *Reduce unnecessary burden on stakeholders.*

MEASURES	RESULTS
1. Complete specific milestones to reduce unnecessary regulatory burden.	This measure was met in FY 2001.

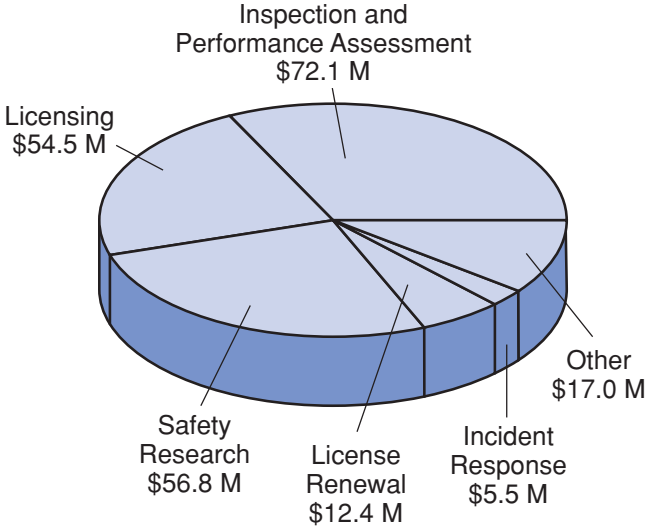
The milestone to reduce unnecessary regulatory burden for FY 2001 was to develop a process for collecting data and identify activities that have the greatest impact on reducing unnecessary regulatory burden while maintaining safety. In FY 2001 we surveyed our licensees to identify specific types of unnecessary regulatory burden they encounter. We are now analyzing the concerns and suggestions offered by the licensees and stakeholders.

Funding for Achieving Our Strategic and Performance Goals

The reactor budget totaled $218.3 million in FY 2001. It was spent on six key programs (see chart below). Each program provides a specific, and linked, role to ensure safety at nuclear power plants. For example, the licensing program sets the standards and procedures for operating nuclear power plants. The inspection and performance assessment program inspects the plants and collects information which ensures that licensing obligations are being followed and that the plant's performance is within the required safety range.

Budget Authority by Program (Millions)

Total Funding was $218.3 Million



Program Evaluation

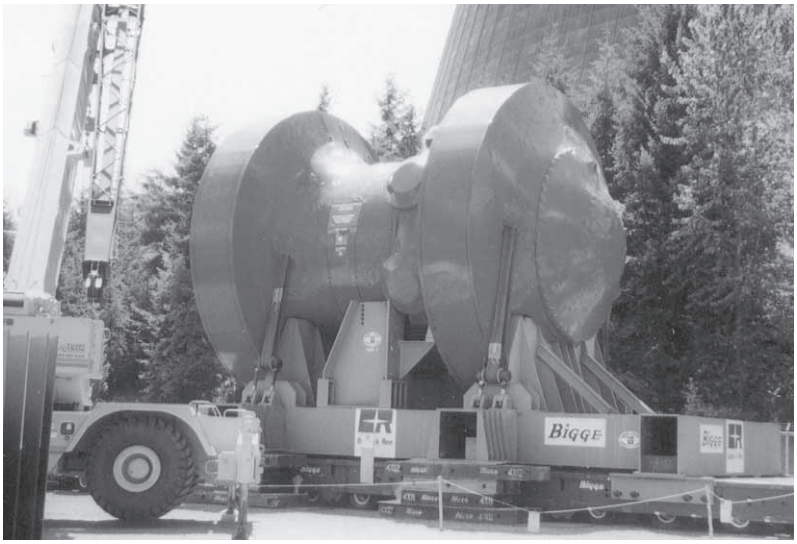
The reactor oversight process (ROP) provides an integrated assessment of licensee performance at each nuclear reactor site. The assessment is used to identify agency actions to ensure licensees address performance weaknesses. In FY 2000, the NRC revised its ROP to improve its objectivity, make it more understandable and predictable, and to increase the focus on aspects of plant performance which had the greatest impact on safe plant operation. The improved processes include a risk-informed inspection program, use of licensee-reported performance indicator information, and revised assessment and enforcement activities.

The NRC conducted a program evaluation of the revised ROP during FY 2001 to evaluate the effectiveness of its first year of implementation. The evaluation's objectives were to determine whether the revised ROP (1) improved the objectivity of the oversight so that subjective decisions and judgments are not central features of the process, (2) improved the clarity of the oversight so that NRC actions have a clear tie to licensee performance, and (3) risk-informed the process to focus NRC and licensee resources on performance having the greatest impact on safety.

The staff collected internal and external stakeholder feedback and comments to evaluate the new process during its initial implementation. As part of this effort, objective measures and predetermined criteria were used to evaluate its performance. Internal feedback and comments from NRC staff were obtained through periodic meetings between Headquarters and regional staff, regional and site visits by Headquarters staff, the use of a formal feedback process, and a staff survey. Feedback and comments from external stakeholders were solicited through monthly public meetings, a Lessons Learned Public Workshop held at the end of initial implementation, and a *Federal Register* notice. Finally, an Initial Implementation Evaluation Panel (IIEP) was established by the Agency in accordance with Federal Advisory Committees Act (FACA) requirements to serve as an advisory committee to the Agency.

Internal stakeholders generally had a more positive view of the revised ROP following the first year of implementation than they had follow-

ing a 6-month pilot program in 1999. They showed a marked increase in their understanding and acceptance of it. They felt that the process provided appropriate regulatory attention to licensees with performance problems and was an effective risk-informed approach to oversight. However, internal stakeholders did express several concerns. A majority indicated that the significance determination processes (SDPs) are not easy to use. Inspectors were concerned that the threshold was too high for documenting findings that could be precursors to more significant issues and were concerned about how cross-cutting issues are addressed in the ROP framework. A significant percentage of internal stakeholders continue to express concern regarding the ROP's ability to provide appropriate identification of declining safety performance in a timely manner.



A reactor vessel loaded onto a ground transporter

In general, external stakeholders indicated that the ROP improved consistency, reduced unnecessary regulatory burden, and increased the predictability of Agency actions. The industry, and many public stakeholders, perceived the ROP as more objective and understandable, with an increase in regulatory focus on risk significance. Industry and public stakeholders also had numerous comments and concerns targeted at improving various parts of the ROP. For example, many felt that the characterization of safety significance by the SDPs was slow and complex to the point of being burdensome. The industry also strongly felt that inconsistencies and overlap in the safety system unavailability performance indicator definitions (e.g., between the ROP and Requirements for Monitoring the Effectiveness of Maintenance at Nuclear Power Plants) needed to be addressed. Feedback from public stakeholders was mixed. While some members of the public believed that the ROP was overall a more effective oversight process, others felt that the ROP was poorly focused, did not identify declining performers in a timely manner, and did not result in adequate assurance of safe reactor operation. These cementers view the new ROP as a step backwards.

The IIEP reviewed the results and lessons learned for ROP initial implementation and concluded that the ROP is a notable improvement over the previous licensee performance assessment program. The IIEP determined that the ROP has made progress toward achieving the Agency's four performance goals. The IIEP recommended that the staff take certain actions to ensure that it achieves the Agency performance goals in the long-term, and consider other actions to improve the process. Most of the IIEP conclusions and recommended actions were consistent with the staff's evaluation of the results of initial implementation.

In addition to utilizing feedback to provide insights regarding the efficacy of the ROP, the staff took advantage of situations encountered during initial implementation to identify lessons learned and improvement opportunities. As a result of specific lessons learned, adjustments to resource estimates and planning models were made and changes were made to strengthen inspection procedures and guidance.

Based on its assessment of stakeholder feedback and the results and lessons learned from initial implementation, the staff is confident that the revised ROP is more objective, risk-informed, understandable, and predictable. The ROP has been tested such that the staff has gained insights on many aspects of the ROP and identified issues that were not revealed during the pilot program. The staff recognized that the ROP will continue to require scrutiny and oversight and has established a self-assessment program that will identify additional areas for improvement.

In addition to evaluating the ROP, the NRC undertook a comprehensive evaluation of its reactor safety research program. As a means of supplementing internal planning, input was sought from stakeholders on the role and future direction of the research program. A panel of experts was assembled to obtain their views and comments on the vision, mission, role, and general direction of regulatory research. The 17-member panel was chaired by former Commissioner Kenneth Rogers and included representatives from industry, academia, government, and public interest groups. The results of the expert panel review are documented in NUREG-1802, Volumes I & II. The scope of the panel's review was broad and covered a wide range of NRC research program issues. The panel recommended that the research program should:

- ensure its role as an unassailable source of technical information and support for regulatory actions;
- perform research in anticipation of regulatory needs;
- increase cooperative work with other organizations; and
- establish a clear and concise definition of the research conducted by the NRC.

In addition to the broad general recommendations, other important issues and recommendations made by individual panel members are provided for NRC consideration.

In addition to the expert panel review, the Advisory Committee on Reactor Safety (ACRS) reviewed the research program. The ACRS presented its findings and recommendations that emerged from an assessment conducted from March 2000 through March 2001. The report, NUREG-1635, Vol. 4, "Review and Evaluation of the Nuclear Regulatory Commission Safety Research Program," included a number of recommendations for new or expanded research activities as well as fifteen recommendations for research activities that should be closed.

Nuclear Materials Safety

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 strategic arena encompasses NRC-regulated aspects of nuclear fuel cycle facilities and nuclear materials activities. This arena has oversight of more than 20,000 specific and 150,000 general licensees. These licensees are regulated by the NRC and its 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.

Control Room at a Nuclear Power Plant

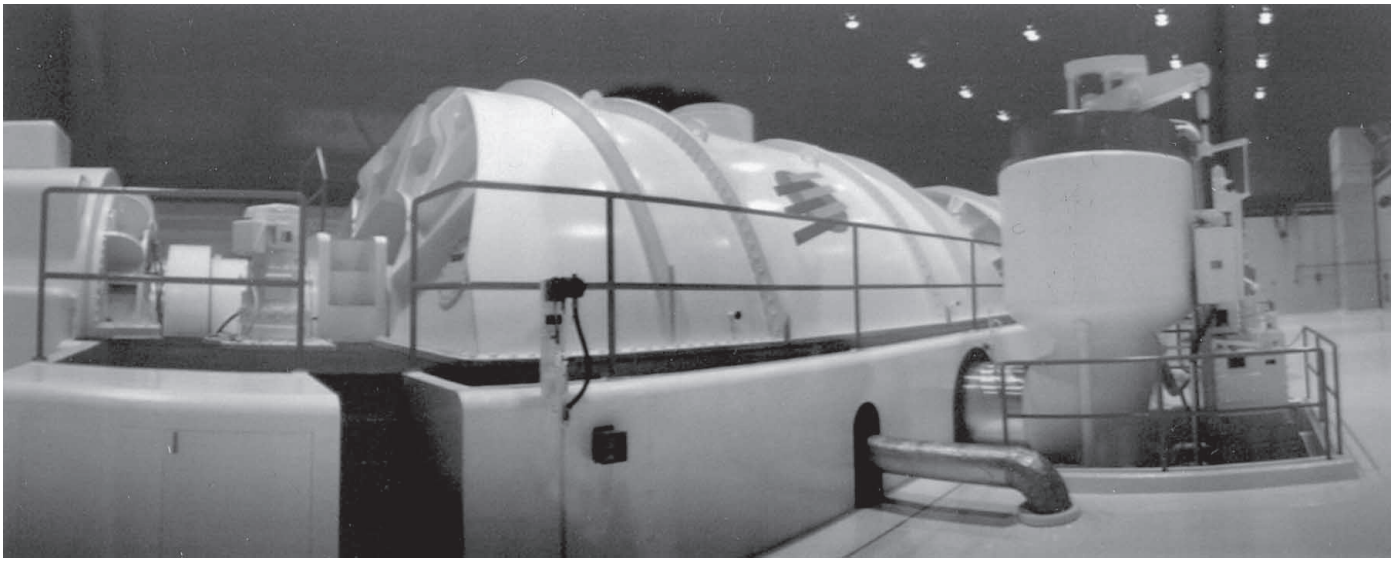
Ensuring the Safe Use of Nuclear Materials

The Nuclear Materials Safety Arena has oversight of several distinct program areas. These programs are discussed below.

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 mission. 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 47 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.

NRC issues and maintains licenses or certificates to fuel facility operators, to authorize their possession and use of source,



Turbine-Generator

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. In FY 2001, The NRC completed 299 fuel cycle licensing actions and conducted 144 inspections of fuel cycle licensees.

A significant licensing action was initiated in February 2001, by 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 (DOE) 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 performed an acceptance review of the application and announced an opportunity for a hearing. An NRC web site for MOX information was developed and has posted all appropriate incoming and outgoing documents on this web site as long as they are not proprietary.

Three public meetings were conducted at various locations near the proposed site to gather comments from the public on the scope of the environmental impact statement that the staff will prepare for the license application review.

In FY 2001, the NRC staff proceeded to implement significant amendments to 10 CFR Part 70 which became effective on October 18, 2000. The amendments increase the use of risk information for fuel cycle facilities. To support implementation of the amended Part 70, NRC published NUREG 1513, Integrated Safety Analysis Guidance Document, which provides guidance to NRC fuel cycle licensees and applicants on how to perform an integrated safety analysis and document the results. The NRC worked with stakeholders to substantially complete development of the Standards Review Plan to implement the new requirements. Staff also reviewed and interacted with licensees on their plans for developing integrated safety analyses and associated revisions.

The NRC continued its oversight of the United States Enrichment Corporation's (USEC's) two gaseous diffusion uranium enrichment plants

located in Paducah, Kentucky and Portsmouth, Ohio. In March 2001, NRC issued an amendment to the Certificate of Compliance for the Paducah, Kentucky, facility which allowed the Paducah facility to enrich uranium up to a maximum of 5.5 weight percentage.[11] NRC issued an amendment to the Certificate of Compliance for the Portsmouth facility to enable the licensee to continue to utilize the facility for sampling and transfer operations. This amendment was issued in a timely manner enabling USEC to test the modification in advance of shutting down the Portsmouth cascade.

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 such commercial products as smoke detectors and other sealed sources and devices. In FY 2001, NRC completed 4,166 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 assure 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. NRC completed 1,387 nuclear materials program inspections in FY 2001.

In the past year, the Materials Licensing and Inspection programs made significant progress 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, which will be further evaluated and refined in FY 2002.

The NRC continued its monitoring of materials safety issues through its event evaluation and incident response activities. In FY 2001, an event occurred in Panama involving the incorrect use of treatment planning software for performing therapeutic radiation treatments. After an analysis of the event, an Information Notice was sent to all medical licensees to inform them about the proper use of treatment planning software for performing therapeutic radiation treatments.

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”. This program works with these other organizations to ensure that the State programs are adequate and compatible with NRC regulatory programs to attain a uniform materials safety policy throughout the nation. The NRC, with Agreement State participants, also 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.

Strategic and Performance 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.*

MEASURE	RESULTS
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.[12] 2. No more than six events per year resulting in significant radiation or hazardous materials exposures[13] from the loss or use of source, byproduct, and special nuclear materials. 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.[14] 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.[15] 5. No unauthorized disclosure or compromise of classified information causing damage to national security.[16]	All measures were met each year in FY 1997 through 2001. In FY 1999, 4 events occurred related to measure Number 2.

Performance Goals

In addition to our strategic goals, the NRC also has four performance goals and measures for the Nuclear Materials Safety. The performance goals are:

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

Performance Goal Results

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

MEASURES

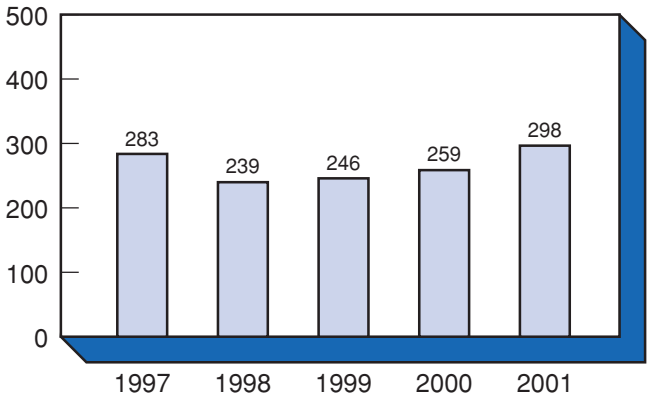
1. No more than 350[17] losses of control of licensed material per year.[18]
2. No occurrences of accidental criticality.[19]
3. No more than 40 events per year[20] resulting in radiation over-exposures[21] from radioactive material that exceed applicable regulatory limits.
4. No more than 45 medical events per year.[22]
5. No more than 6 releases per year[23] to the environment of radioactive material from operating facilities that exceed the regulatory limits.[24]
6. No more than 5 substantiated cases per year of attempted malevolent use[25] 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.[26]
8. No non-radiological events that occur during NRC-regulated operations that cause impacts on the environment that cannot be mitigated within applicable regulatory limits, using reasonably available methods.[27]

RESULTS

All measures were met each year in FY 1997 through 2001.

For the first measure, there were 298 losses of control of licensed material in FY 2001. This was within our target of 350. The target was lowered in FY 2001 from 356 to 350 and was further lowered in FY 2002-2003 from 350 to 300. (See graph below.)

No More than 350 Losses of Control of Licensed Nuclear Material

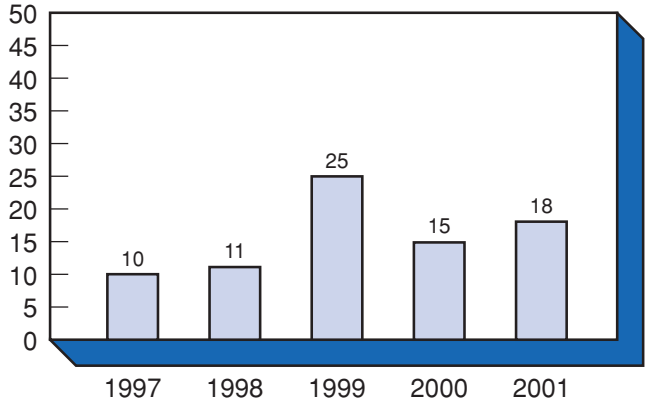


This measure tracks reportable events of materials entering the public domain in an uncontrolled manner. Many of the events counted here do not, on an individual basis, present a public health and safety risk. For example, majority of the losses of control of licensed material are of shielded materials,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

For the second measure, there were no instances of accidental criticality in FY 2001, or in any year since data collection began in FY 1997. Inadvertent criticality accidents are required to be reported whether or not they result in exposures or injuries to workers or the public and whether or not they result in adverse impacts on the environment. Events of this magnitude are not expected and would be rare.

Our third measure indicates that there were 18 events resulting in radiation over-exposures from radioactive material that exceeded applicable regulatory limits in FY 2001. For the years since data collection began, the peak year was FY 1999 when 25 events occurred. (See graph below.)

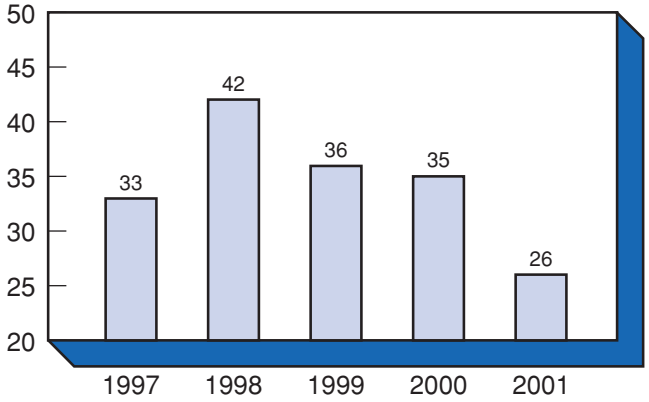
No More than 40 Events Resulting in Radiation Over-Exposures



For fuel cycle facilities, this measure 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.

For the fourth measure there were 26 medical events in FY 2001. For the years since GPRA-related data collection began, the peak year was FY 1998 when 42 events occurred. Since that time the trend is downward. (See graph below.)

No More than 45 Medical Events

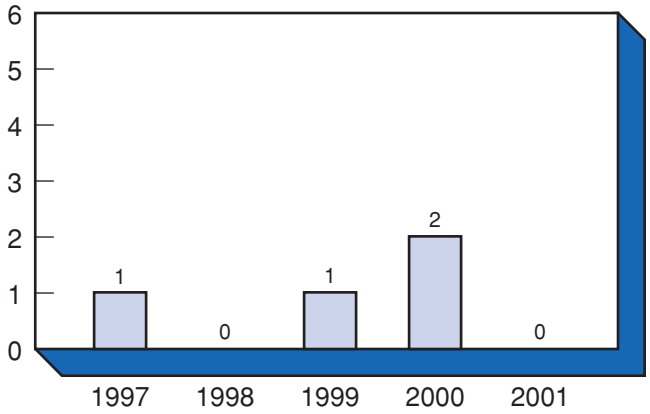


This measure pertains to medical events reported under 10 CFR Part 35, "Medical Use of Byproduct Material." The NRC's medical use program includes users of byproduct material in medical diagnosis and therapy.

As an indicator of the effectiveness of our nuclear materials environmental programs, for the fifth measure there were no releases to the environment that exceeded regulatory limits in FY 2001. (See graph below.)

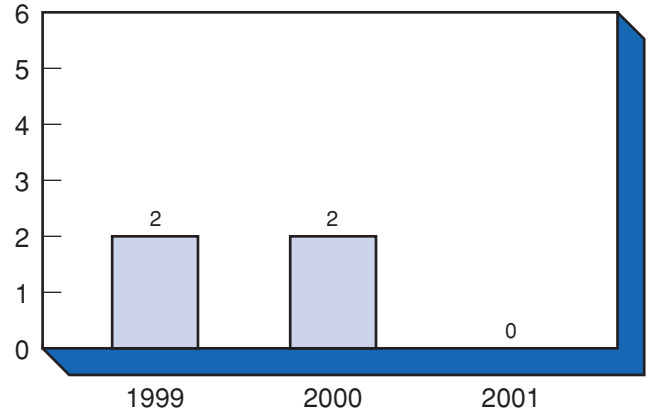
Releases under 10 CFR 20.2203(a)(3) are counted for this performance measure.

No More than 6 Releases to the Environment



Our sixth performance measure tracks our effectiveness at deterring or preventing malevolent uses of nuclear materials. There were no cases of attempted malevolent use of source, byproduct, or special nuclear material in FY 2001. (See graph below.)

No More than 5 Substantiated Cases of Malevolent Use of Source, Byproduct or Special Nuclear Material



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 deliberate acts against this definition.

Our seventh performance measure indicates that there were 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 in FY 2001, or in any year since GPRA related data collection began in FY 1997. Events collected under this performance measure may indicate a vulnerability to radiological sabotage, theft, diversion, or loss of special nuclear materials, thereby compromising public health and safety.

For the eighth measure, there were no instances of non-radiological events that occur during NRC-regulated operations that cause impacts on the environment in FY 2001, 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 non-radiological 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.

Performance Goal: *Increase public confidence.*

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.
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 goal measure targets were met in FY 2001 Performance measure four was not applicable in FY 2001 because no petitions were filed in the nuclear materials safety arena in FY 2001.

For measure number one, the milestones to conduct semi-annual evaluations of public meeting feedback forms were met for FY 2001. These forms have been evaluated to determine their usefulness in assessing public confidence. NRC compiled and analyzed the results of all the feedback forms received from the public for the period March 31 to September 1, 2001. NRC has analyzed 182 public meeting feedback forms representing 33 meetings. Trending information was included in the semi-annual evaluations. (See the Nuclear Reactor Safety arena for discussion of trend analysis) NRC staff will be terminating the pilot program in February 2002 and will make a final recommendation to the Commission regarding further use of the forms.

Holding public outreach meetings is a method to provide the public with information on NRC activities. All of the scheduled public outreach meetings for measure number two were held.

The FY 2001 milestone for performance measure three was to start distributing a survey to stakeholders bringing safety and non-compliance regulatory allegation issues to NRC's attention.

The purpose of the survey is to ascertain how NRC did in responding and addressing the allegers issues. The survey results are currently being analyzed.

Measure number four was not applicable because there were no petitions filed under 10 CFR 2.206 in the Nuclear Materials Safety Arena in FY 2001.

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

MEASURES	RESULTS
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.	All of these performance measure targets were met in FY 2001.

Measure number one focuses on progress in developing a coordinated approach to implementing risk-informed decisions throughout the agency's regulatory processes. The milestones towards developing a risk-informed regulation implementation plan (RIP-IP) were completed on schedule. These included sending the RIP-IP to the Commission and briefing them on the contents (October-November 2000) and developing final criteria and milestones for Commission approval (August 2001).

Measure number two shows steps taken to improve our internal processes. This year four process improvements were completed. These were the Nuclear Materials Phase I and II studies, a rulemaking efficiency process review, and a self-assessment of the sealed source and device program. These are described in more detail in the Program Evaluation section of this report.

Performance Goal: *Reduce unnecessary burden on stakeholders.*

MEASURES	RESULTS
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 5 years.	We did not meet our performance measure targets for this goal in FY 2001.

We did not meet our target for either measure. For the first measure, the NRC completed work on the Part 35 rule earlier this year, and received conditional approval from OMB for clearance of information collection requirements on September 18, 2001. However, Public Law 107-66 (Energy and Water Development Appropriations Act, 2002) included a prohibition on spending NRC funds to implement or enforce revised Part 35, with respect to diagnostic nuclear medicine. The Commission was instructed by Congress to reexamine revisions to Part 35 and provide a

report to Congress in FY 2002 which explains why the burden imposed by revised Part 35 could not be further reduced. Once this report is submitted, the revised Part 35 may be implemented.

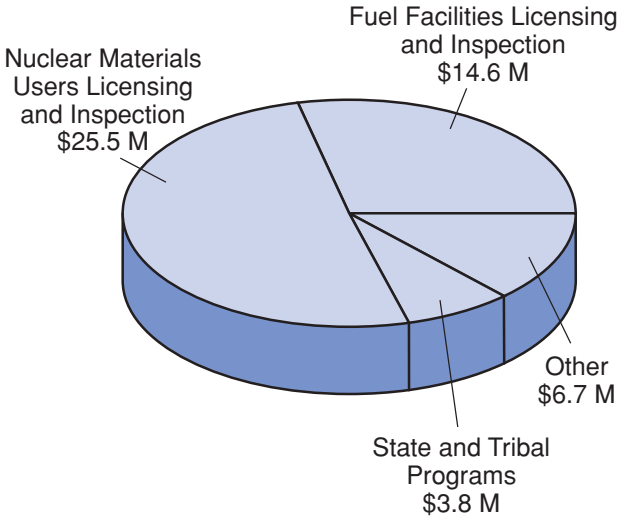
We did not meet our target for the second measure. However, in FY 2001, the staff's focus on reducing paperwork and recordkeeping imposed by NRC centered on the revision to 10 CFR Part 35, which the staff estimates will result in a 12 percent reduction as compared to the current requirements, when it is made effective. Implementation of Part 35 was pending during FY 2001 while awaiting Congressional decision but will proceed in FY 2002. Note that other rulemaking actions result in an increase in necessary burden (and therefore in the total burden) as part of an effort to protect public health and safety. For example, a change to Part 70 (Special Nuclear Material) created a modest increase in paperwork requirements.

Funding for achieving our strategic and performance goals

The nuclear materials safety arena budget totaled $50.6 million in FY 2001. More than 85 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 state and tribal programs (see chart below).

Budget Authority by Program (Millions)

Total Funding was $50.6 Million



Program Evaluation

The National Materials Program

In the continuing effort to improve the effectiveness of the broader materials safety program, NRC has undertaken to partner with Agreement States on the development of a National Materials Program. The objectives of this comprehensive program review are:

- Protect public health and safety;
- Optimize resources of Federal, State, professional, and industrial organizations;
- Account for individual agency needs and abilities;
- Promote consensus on regulatory priorities;
- Promote consistent exchange of information;
- Harmonize regulatory approaches; and
- Recognize State and Federal needs for flexibility.

In support of this effort, NRC convened a Working Group of NRC and Agreement State representatives to coordinate with a Panel established by the Conference of Radiation Control Program Directors, Inc., (CRCPD), to examine the structure and framework for a National Materials Program. The National Materials Program Working Group, consisting of six representatives from States, six NRC representatives and an NRC advisor, first met in early 2000.

The Working Group evaluated different approaches to and elements of a national materials and radiation control program. These elements included aspects of: licensing and inspection programs, rule and guidance development, and mechanisms for communicating with stakeholders. Once basic program elements were identified, the Working Group next developed and evaluated a range of possible options for a national program. After defining the current national regulatory program, five alternative ap-

proaches were developed and evaluated. These alternatives ranged from allowing all States to independently regulate all radioactive materials without Federal oversight, to a structure with only one regulatory entity having jurisdiction over all radioactive material in the United States.

During this process, the Working Group conducted a tabletop exercise at the October 2000 Organization of Agreement States meeting, and made presentations and held discussions at the 2000 and 2001 annual meetings of the CRCPD.

The Working Group considered the advantages and disadvantages of each option and potential resource implications, and issued its recommendations in a Report. The Working Group Report also presents the history, current status and a prediction of future challenges for the national program. The Report envisions a cooperative, consensus approach (Alliance Option) to a national program as the best vehicle for achieving NRC's current strategic goals, as well as the goals and objectives of a future National Materials Program.

Review of Byproduct Materials Program

A two-phase evaluation of aspects of the nuclear materials program was conducted in FY 2001. The circumstances surrounding the overexposures at the Mallinckrodt facilities were reviewed in Phase 1, and the follow-on Phase 2 group conducted an independent review of the nuclear byproduct materials program. Each of these reviews led to a series of recommendations (long-term and near-term) for improving and risk-informing the nuclear materials program.

Integrated Materials Performance Evaluation Program (IMPEP) Reviews

In FY 2001, NRC completed a review of the Region I 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 I operations to be fully satisfactory with respect to technical quality of licensing, inspections, status of the inspection program, response to incidents and allegations, and technical staffing and training. The Management Review Board (MRB) supported the team's proposed findings and determined that the program was operating in a manner that was adequate to protect public health and safety.

Evaluation of Sealed Source and Device Program

An evaluation of aspects of the Sealed Source and Device Program was conducted. The review team found program operations to be fully satisfactory as compared with performance benchmarks. An MRB meeting was scheduled for a later date in FY 2002 to review the team's findings.

Other Reviews

A review of the rulemaking process was completed in FY 2001, resulting in the development of an improved direct final rule process that will streamline future rulemakings. Also in FY 2001, a review of the IMPEP process, and a review of the Event Reporting Program were conducted.

Nuclear Waste Safety

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 decommissioning of nuclear reactors and other facilities, storage of spent nuclear fuel, transportation of radioactive materials, and disposal of radioactive wastes.

The NRC has regulatory oversight for the transportation of radioactive materials and the interim storage of spent nuclear fuel. 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. Therefore, the NRC's activities under the NWPA now focus on a potential Yucca Mountain repository. NRC efforts in this arena also include decommissioning, waste safety research, low-level waste disposal and spent fuel storage and transportation licensing. The NRC's low-level radioactive waste activities are conducted in accordance with the Low-Level Radioactive Waste Policy Act of 1980, amended in 1985.

Ensuring the safe transportation and disposal of nuclear waste

The Nuclear Waste Safety Arena has oversight of several distinct program areas. These programs are discussed below.

Spent Fuel Storage and Transportation Licensing and Inspection

Approximately three million shipments of radioactive materials are made each year in the United States. Regulating the safety and security of these shipments is a responsibility shared by a number of different Federal agencies, including the NRC. 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. NRC's transportation activities are closely coordinated with those of the Department of Transportation (DOT) and, as appropriate, with the DOE and the Federal Emergency Management Agency. NRC's transportation activities also include reviewing transportation plans, performing physical security reviews and surveys for shipments of nuclear material, and relaying to DOT notifications from licensees and carriers of planned import, export, or domestic shipment of nuclear material.

During FY 2001, NRC implemented changes to 10 CFR 72.48, "Changes, Tests, and Experiments." These changes to the regulation permit a licensee or certificate holder to make minor changes to a spent fuel storage cask or facility, without prior NRC review and approval, thereby reducing the burden and increasing the flexibility for both the licensee and the NRC.

These changes are limited to those that do not impact public health and safety.

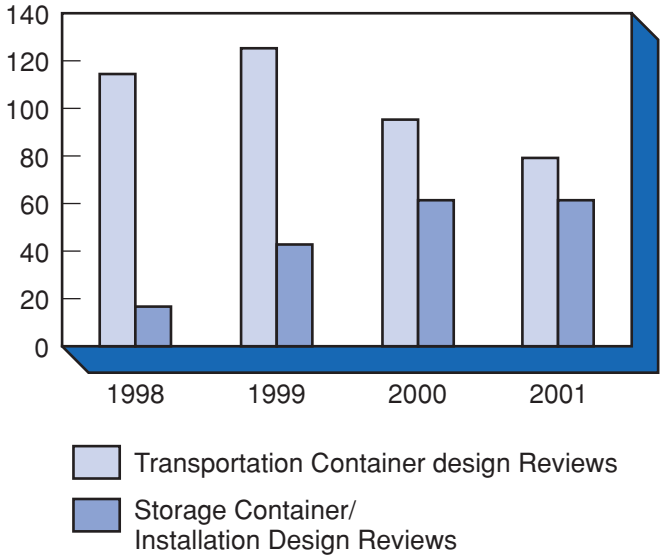
NRC also achieved a significant reduction in the time necessary to process certificates of compliance rulemaking actions for the interim storage of spent fuel. This streamlining initiative has increased industry storage options, and in so doing, has addressed an important national need.

Two rulemakings were completed to certify new storage cask designs for use at reactor sites under the general license provisions, and eight significant rulemakings associated with Certificate of Compliance amendments for six different storage cask designs were completed. These rulemakings and amendments support the storage needs of specific utilities intending to use the designs as modified. Also completed were the initial transport certification of a dual-purpose cask design, and two transportation cask revisions for a dual-purpose design. In addition, the NRC completed a safety evaluation report for a Naval Reactors independent spent fuel storage installation, and approved a topical report on the Central Interim Storage Facility for the Department of Energy.

Starter tunnel at proposed Yucca Mountain site

In FY 2001, the Spent Fuel Storage and Transportation Licensing and Inspection program completed 79 transport container design reviews and 62 storage container and installation design reviews. (See graph below that displays the results from FY 1998-2001.) Note that the number of transport container design reviews completed during FY 1998-2001 reflect an increase in the number of amendment requests received for non-spent fuel container designs in those years due to new 10 CFR Part 71 requirements, incorporating 1985 International Atomic Energy Agency regulations. Fewer completions of design reviews in FY 2000-2001 reflects a decrease in the numbers of amendment requests in each of those years from prior fiscal years.

Storage and Transportation Design Reviews Completed



High-Level Waste Regulation

The NRC's HLW program is conducted 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 characterization and repository design, and continuing through development, operation, and ultimate closure of a deep geologic repository. The EPA has been charged with developing

Yucca Mountain specific environmental standards, consistent with the recommendations of the National Academy of Sciences, that will be used to evaluate the safety of the potential geologic repository developed by DOE. The NRC has extensive pre-licensing responsibilities and is the regulatory authority to issue a license, if appropriate, after determining whether the potential DOE license application for a geologic repository at Yucca Mountain, Nevada, complies with the applicable regulatory standards.

In FY 2001, the NRC approved the final regulations for 10 CFR 63, providing site-specific criteria for use in a possible licensing decision on a potential waste repository at Yucca Mountain, Nevada. These regulations are consistent with the EPA standards. The NRC also reviewed the DOE's Supplemental Draft Environmental Impact Statement for the potential high-level waste repository at Yucca Mountain, Nevada.

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

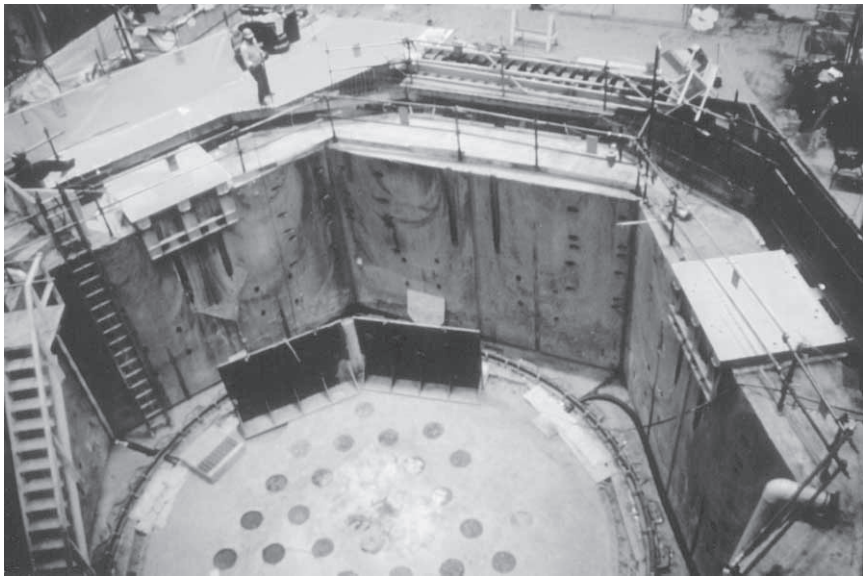
Decommissioning

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, 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 they can be implemented by licensees. By conducting inspections, the NRC evaluates the licensee's ability to store or dismantle and decontaminate the facility in a safe manner 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, and institutional control; conducting reviews of decommissioning plans; conducting environmental reviews; and preparing Environmental Impact Statements (EISs), as appropriate.

The NRC maintains a Site Decommissioning Management Plan (SDMP) list which contains sites that are complicated by technical, financial, and/or other challenges that must be addressed before decommissioning can be completed. During FY 2001, NRC approved the removal of one site from the SDMP.



Decommissioning of the Ft. St. Vrain reactor in Colorado

The NRC also completed the safety and environmental review of the Trojan Nuclear Plant License Termination Plan (LTP) leading to the first approval by the staff of an LTP submitted pursuant to NRC's requirements at 10 CFR 50.82.

NRC completed its evaluation of previously terminated licenses to determine if the facilities had been adequately decontaminated prior to license termination. Appropriate follow-up actions are being taken for those sites requiring further review.

Waste Safety Research

The Waste Safety Research program supports the NRC's activities associated with decommissioning of nuclear reactors and other facilities, and the interim storage and transportation of spent nuclear fuel. Research activities provide the technical basis to confirm the adequacy of regulations and guidance to maintain safety in areas such as decommissioning and interim spent fuel storage.

Strategic and Performance 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.*

MEASURES	RESULTS
1. No deaths resulting from acute radiation exposure from radioactive waste.[28] 2. No events resulting in significant radiation exposure[29] from radioactive waste. 3. No release of radioactive waste causing an adverse impact on the environment.[30] 4. No losses, thefts, diversion, or radiological sabotages[31] of special nuclear material or radioactive waste.	All measures were met each year in FY 1997 through 2001.

The first measure identifies death to an individual as a result of short term exposure to radiation. 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. The second measure identifies significant radiation exposures that result in unintended permanent functional damage to an organ or a physiological system as determined by a physician. 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. The third measure identifies releases that have the potential to cause "adverse impact." Such releases are currently undefined; as a surrogate, NRC will use those that exceed the limits for reporting abnormal occurrences. Events meeting this threshold are also reported to NRC and/or Agreement States primarily through required licensee notifications, though other sources may also report events. The fourth measure identifies any losses, theft, diversion, or radiological sabotages of radioactive waste being stored at a nuclear facility or while in transit. Licensees report events which entail losses, thefts, diversions, or radiological sabotages of special nuclear material or radioactive waste within one hour of their occurrence to the NRC Headquarters Operations Center.

Performance Goals

In addition to our strategic goals, the NRC also has a set of four performance goals and associated performance measures for the nuclear waste safety arena. The performance goals are:

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

Performance Goal Results

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

MEASURES

1. No events resulting in radiation overexposures[32] from radioactive waste that exceed applicable regulatory limits.[33]
2. No breakdowns of physical protection resulting in a vulnerability to radiological sabotage, theft, diversion, or loss of special nuclear materials or radioactive waste.[34, 35]
3. No radiological releases[36] to the environment from operational activities that exceed the regulatory limits.[37]
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.[38, 39]

RESULTS

All measures were met each year in FY 1997 through 2001.

For the first measure, there were no radiation overexposures from radioactive waste that exceeded regulatory limits in FY 2001 or in any year since GPRA related data collection began in FY 1997. Radiation over-exposures are those events that exceed limits provided by NRC regulation10 CFR 20.2203(a)(2). This measure focuses on events which could result in public or worker overexposures. The events captured by this measure were chosen to identify processes or procedures that could be indicators of potential weaknesses in the regulatory program which need to be addressed.

For the second measure, there were no breakdowns of physical protection resulting in a vulnerability to radiological sabotage, theft, diversion, or loss of special nuclear materials or radioactive waste in FY 2001, 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.

For the third measure, there were no radiological releases to the environment from operational activities that exceeded the regulatory limits in FY 2001 or in any year since GPRA related data collection began in FY 1997.

For the fourth measure, there were no instances where the NRC did not provide an ad-

equate regulatory framework for radioactive waste and materials under the NRC's regulatory jurisdiction to be handled, transported, stored, or disposed of safely in FY 2001 or in any year since GPRA related data collection began in FY 1997. NRC monitors the needs for transportation of materials and waste within its regulatory authority. The NRC also monitors the needs for storage and disposal of nuclear wastes under its regulatory authority. For the majority of radioactive waste or materials, there are no expected instances where they cannot be handled, transported, or disposed of safely now or in the future. However, there may be a potential that sites that were thought to be previously cleaned up and NRC's licenses terminated may require additional cleanup. To address this issue, NRC evaluated all terminated licenses and, in FY 2001, identified two facilities that could require additional cleanup. Appropriate follow-up actions are underway for these few facilities.

Performance Goal: *Increase public confidence.*

MEASURES

1. Complete milestones relating to collecting, analyzing, and trending information for measuring public confidence.
2. Complete all the public outreaches.[40]
3. Complete the milestones specific to the agency allegation program effectiveness assessment plan.
4. Issue Director's Decisions for petitions filed to modify, suspend, or revoke a license under 10 CFR 2.206[41] within an average of 120 days.[42]

RESULTS

The first three performance measure goal targets were met in FY 2001. Performance measure 4 was not applicable in FY 2001 because no petitions were filed in the nuclear materials safety arena in FY 2001.

The first milestone to conduct semi-annual evaluations of public meeting feedback forms was met for FY 2001. These forms have been evaluated to determine their usefulness in assessing public confidence. NRC compiled and analyzed the results of all the feedback forms received from the public for the period March 31 to September 1, 2001. NRC has analyzed 182 public meeting feedback forms sent in by the Offices and Regions, representing 33 meetings. Trending information was included in the semi-annual evaluation. (See the Nuclear Reactor Safety arena for discussion of trend analysis)

NRC staff will be terminating the pilot program in February 2002 and will make a final recommendation to the Commission regarding further use of the forms.

The second measure to holding public outreach meetings is a method to provide the public with information on NRC activities. Four of the scheduled public outreach meetings were held.

The FY 2001 milestone for performance measure three was to start distributing a survey to stakeholders bringing safety and non-compliance regulatory allegation issues to NRC's attention. The purpose of the survey is to ascertain how NRC did in responding and addressing the allegers issues. The survey results are currently being analyzed.

The fourth measure assesses the timeliness by which Director's Decisions for petitions filed to modify, suspend, or revoke a license under 10 CFR 2.206 are issued. There were no petitions filed under 10 CFR 2.206 in the Nuclear Waste Safety arena in FY 2001.

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

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.[43]

RESULTS

All of the performance goal measure targets were met in FY 2001, except two milestones in measure number three over which the NRC did not have control.

The first measure focuses on progress in developing a coordinated approach to implementing risk-informed decisions throughout the agency's regulatory processes. The milestones towards developing a risk-informed regulation implementation plan (RIP-IP) were completed on schedule. These included sending the RIP-IP to the Commission and briefing them on the contents (October-November 2000) and developing final criteria and milestones for Commission approval (August 2001).

For the second measure, five process improvements were completed in FY 2001. The nuclear waste safety arena developed and implemented a more efficient and focused regional decommissioning inspection program; developed and implemented a phased review of decommissioning plans for restricted release sites; developed guidance for changing Licensing Termination Plans without requiring a license amendment; conducted annual self-assessment of the process for resolving the key technical issues for licensing a potential high-level repository at Yucca Mountain Nevada site; and issued generic guidance for implementing revisions to 10 CFR 72.48, "Changes, Tests and Experiments," which were designed to improve the flexibility of the regulation.

For the third measure, three of the five milestones were completed in FY 2001. The issuance of the Yucca Mountain Review Plan document could not be completed in FY 2001. 10 CFR Part 63 Disposal of High-Level Radioactive Waste in a Proposed Geologic Repository at Yucca Mountain Nevada," formed the basis to complete the document, and the final rule was approved by the Commission on September 7, 2001, after resolution of complex issues concerning Yucca Mountain standards. NRC published the final 10 CFR Part 63, revised to conform to the final EPA standards, on November 2, 2001. The Site Characterization Sufficiency Comments were not completed in FY 2001 because in July 2001, DOE requested that NRC include an additional document in its review and that request extended the time needed by NRC to complete its review to November, 2001.

Performance Goal: *Reduce unnecessary burden on stakeholders.*

MEASURE	RESULTS
1. Complete specific milestones to reduce unnecessary regulatory burden.	This performance measure target was met in FY 2001.

The milestone to reduce unnecessary regulatory burden for the Nuclear Waste Safety Arena was completed. NRC reviewed and made recommendations for improving the

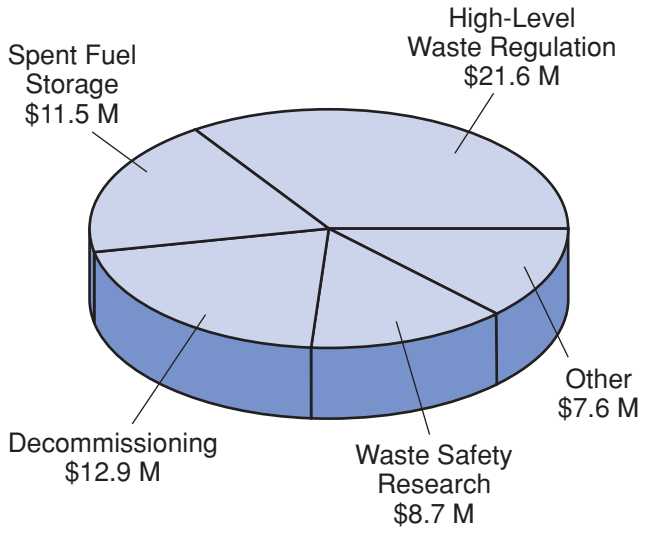
10 CFR Part 72 Cask Certification Process. Improvements included using the direct final rulemaking process and implementing a streamlined rulemaking process to expedite approvals which reduced regulatory burden to our stakeholders.

Funding for Achieving Our Strategic and Performance Goals

The nuclear waste safety arena budget totaled $62.3 million in FY 2001. The funding was allocated on four key program areas (see graph below). Each program area provides a specific role to ensure safety and protection of the public and environment from radioactive waste. High level waste regulation accounted for approximately one third of the allocated funds. The regulation of decommissioning accounted for another 20 percent. Waste Safety Research, which accounted for approximately 13 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.

Budget Authority by Program (Millions)

Total Funding was $62.3 Million

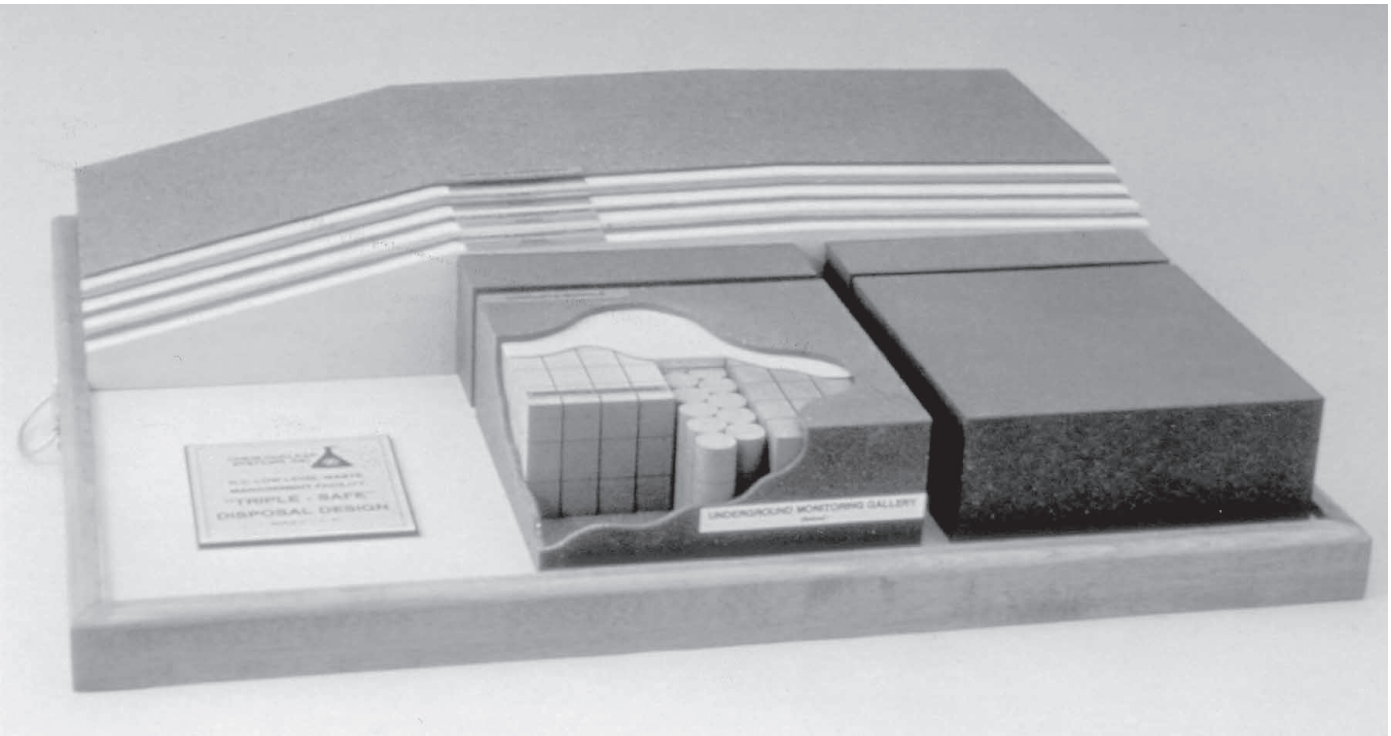


Program Evaluation

Regulation of Decommissioning, Regional Laboratory Evaluations

In July 2001, NRC staff conducted an review of the NRC Region I and Region III laboratories to: (1) evaluate implementation of Regional corrective actions resulting from the annual audit conducted by the U.S. Department of Energy' s (DOE's) Radiological and Environmental Sciences Laboratory (RESL); (2) determine the types and number of samples analyzed since the last audit; and, (3) evaluate results from independent test sample analyses.

In general, Region I and Region III have satisfactorily implemented the corrective actions resulting from the annual RESL audits. To ensure that radiological measurements performed by the laboratories were of acceptable precision and accuracy and also reflected actual conditions and licensee performance, the laboratories participated in independent sample analysis programs. The Region I and Region III laboratories produced acceptable results for all test samples



Modern disposal facility designs employ multiple barriers to contain radioactive waste. Waste is placed in canisters, which are stacked in concrete vaults. A multilayer cover allows runoff, prevents infiltration, and provides radiation shielding.

analyzed. The results from this limited scope surveillance indicate that the Region I and Region III laboratories had adequate controls in place during FY 2001 to produce credible, technically defensible analytical results.

High-Level Waste Regulation, Self-Assessment of the Key Technical Issue Resolution Process

Starting in August 2000, the NRC and DOE began a series of Technical Exchange and Management Meetings, specifically focusing on Key Technical Issues (KTIs). The goal of the KTI issue resolution meetings was to discuss and review the DOE progress on resolving specific KTI sub-issues and then reach agreement with the DOE on what additional information need to be provided and the schedule for providing that information.

Overall, this series of meetings was very successful in focusing the NRC staff in defining what additional information it believes is needed from the DOE to support any future license application. The meetings also allowed the public to comment and ask questions on the individual issues, as well as to provide general comments regarding the potential Yucca Mountain site.

The NRC staff decided that following the completion of a number of these meetings, it would perform a self-assessment of the overall KTI issue resolution process. The self assessment was broken into five main areas: (1) technical exchange lessons learned; (2) issue resolution terminology; (3) communications with the DOE; (4) risk-ranking the KTI agreements; and (5) tracking of the agreements. Each individual area addressed one or more of the four NRC Strategic Plan performance goals. As a result of this self-assessment, the staff identified a number of lessons learned and has provided recommendations to NRC management to ensure that future meetings and activities are effective and efficient, and that the issue resolution process will increase the public's confidence regarding how the NRC will evaluate and review any future license application.

International Nuclear Safety Support

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

Overview

The International Nuclear Safety Support strategic 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 assistance, and deterring 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 U.S. and throughout the world. This includes work with international organizations such as the International Atomic Energy Agency and the Nuclear Energy Agency.

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

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,

Participants from the Central and Eastern European countries and the Former Soviet Union and NRC managers at the IAEA sponsored meeting, "Regulatory Review of Licensee Safety Programme."

nuclear safety research, radiation protection, nuclear materials safety and safeguards,[44] waste management, and decommissioning of nuclear facilities. The NRC can learn, in turn, from the regulatory experience of other countries. NRC gains access to non-U.S. safety information through interaction with foreign entities, thereby leveraging NRC resources. Additionally, the NRC supports the development and implementation of international regulatory standards, policies, and practices.

The International Nuclear Safety Support arena has established three measures to determine our success in meeting our strategic goal for the International Nuclear Safety Support strategic arena. These measures are:

MEASURE

1. Fulfills 100 percent of the significant[45] obligations over which the NRC has regulatory authority arising from statutes, treaties, conventions, and Agreements for Cooperation.[46]
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

The first measure was met each year in FY 1997 through 2001. The other 2 measures have been met since they were established in FY 2000.

For performance measure number one, In FY 2001, NRC carried out 100 percent of the significant obligations over which it has regulatory authority arising from statutes, treaties, conventions and Agreements for Cooperation. For example, NRC facilitated the timely processing of all export license applications; provided timely comments to the Executive Branch when consulted on proposed international nuclear agreements and technology transfers; identified safeguards-eligible facilities and provided associated design information to the Department of State for submission to the International Atomic Energy Agency, as needed; required U.S. licensees to meet mandatory physical protection criteria for nuclear material during international transport; and prepared the U.S. National Report for submission to Parties to the international Convention on Nuclear Safety, in anticipation of the triennial review meeting to be held in Vienna, Austria, in FY 2002.

For performance measure number two, In FY 2001, no significant proliferation incidents were reported by the U.S. Government, the International Atomic Energy Agency, or other authoritative international organization.

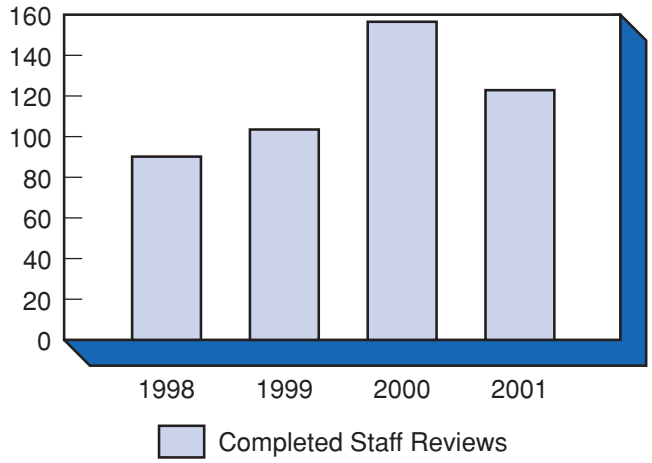
For performance measure number three, in FY 2001, no significant safety or safeguards events were reported by the U.S. Government, the International Atomic Energy Agency, or other authoritative international organization.

During FY 2001, the U.S. National Report for the Convention on Nuclear Safety (CNS) was completed and approved by the Commission. The report was transmitted to the International Atomic Energy Agency (IAEA) Secretariat on September 12, 2001.

The NRC completed action on a proposed export of highly-enriched uranium to Canada for use as target material for medical isotope production.

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.

Issuance of NRC Export/Import Licenses
For All Years, 100 Percent were Completed within 60 Days



The NRC issued 122 import/export authorizations within 60 days (NRC licenses or amendments) including reviews of proposed exports of proliferation-sensitive equipment and materials.

The NRC participated in IAEA Operational Safety Review Team missions to the Czech Republic (two) and Hungary; International Regulatory Review Team missions to Mexico, Lithuania, the Czech Republic and Ukraine; and a Radiation Protection mission to Tajikistan. We conducted bilateral assistance activities in nuclear safety and safeguards with Russia, Ukraine, Armenia, Kazakhstan, and countries of central and eastern Europe in close coordination with the Departments of State and Energy. The NRC successfully negotiated four bilateral exchange agreements in FY 2001 between NRC and appropriate foreign counterparts to ensure that an effective framework for NRC's international exchanges is in place.

Funding for Achieving Our Strategic and Performance Goals

The international nuclear safety support arena budget totaled $4.9 million in FY 2001, 87 percent funded salaries and benefits, and 13 percent funded contract support and travel.

Program Evaluation

There were no program evaluations identified for the international nuclear safety arena in FY 2001.

Verification and Validation of Performance Data

Data Completeness and Reliability

Assessing the reliability and completeness of performance data is critical to managing for results. Comparing actual performance with the projected levels of performance can only be accomplished if the data used to measure performance are complete and reliable. The Report Consolidation Act of 2000 requires that agency heads assess the completeness and reliability of the performance data used in this report. OMB Circular A-11 part 232.10 describes specifically how an agency should assess the completeness and reliability of the performance data. The following discussion on data completeness and reliability is based on the guidance provided by OMB.

Data Completeness

Data are considered complete 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 agency must identify those goals for which actual data are not available at the time the annual report is transmitted and note that the data will be included in a subsequent annual report. The data used by the NRC meet this test for completeness. Actual or preliminary data have been reported for every strategic and performance measure.

Data Reliability

Data are considered reliable 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. Data need not be perfect to be reliable and the cost and effort to secure the best performance data possible may exceed the data's value. The agency managers and decision makers 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 agency managers or decision makers to use the data in carrying out their responsibilities. The data used by the NRC meet the test for reliability.

Data Quality and Sources

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 unscheduled 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 licensees. In 1997, the Commission determined that events occurring at Agreement State licensed facilities that meet the AO criteria should be reported in the annual AO report to Congress. Therefore, the AO criteria developed by the NRC are applied uniformly to events that occur at facilities licensed or otherwise regulated by the NRC and the Agreement States.

One important characteristic of the data used in this report, then, 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 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 database systems that support this process include 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 events 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 events 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.

Data Security

Data security is ensured 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 all types of automated information systems.

Improvements in performance data

In FY 2001, the Commission focused on improving the Nuclear Materials Safety Arena performance data received from Agreement States. In response to issues identified during this analysis, NRC staff members traveled throughout the country to provide training to Agreement State, NRC regional, and headquarters personnel on the use of the events database and data collection procedures.

The NRC analyzed its data verification procedures for all of its performance measures during FY 2001. The analysis evaluated the data collection, data analysis, and reporting procedures for completeness, accuracy, consistency, and timeliness. The analysis also evaluated NRC management controls which ensure that the reported data are valid and reliable. A Management Directive which established standards and responsibilities for our performance measurement system is being developed during FY 2002 to provide guidance to agency personnel on our performance measurement system.

A more complete discussion of data validation and verification is included in our *FY 2003 Budget Estimates and Performance Plan* submitted to Congress. A complete explanation of data verification and validation for each performance measure is provided there. This allows our stakeholders to see specifically what data are being collected for each measure and assess whether those data are appropriate for the measure.

Management Challenges

Included in Appendix A is the Inspector General's summary of the most serious management challenges facing the agency and the agency's progress in addressing them. Also included is management's perspective on how these challenges are being addressed. While some of these issues concern initiatives which are not central to NRC's mission, others are critical in maintaining the agency's future capability to protect the public health and safety.

Chapter IV: Corporate Management and Support

Overview

The NRC has four primary corporate management and support areas which provide the infrastructure for the agency to effectively and efficiently accomplish the mission and its strategic and performance goals. These areas are human capital management, information technology and information management, financial management, and administrative support. The agency and these offices are also focused on implementing the President's Management Agenda.

Human Capital Management

Human capital management and strategic workforce planning at NRC are aimed at effectively supporting the agency's mission, strategic and performance goals, and other organizational needs. During FY 2001, and continuing into FY 2002, NRC has developed and implemented a systematic approach to ensure that it has the appropriate staff skills and competencies to fulfill its traditional safety mission, to enhance safeguards and security in response to the September 11, 2001, terrorist attacks on the United States, and to address potential areas of new regulatory responsibility.

In FY 2001, the staff presented integrated resource data and information to the Commission for the development of the FY 2003 budget submission, that reflected the agency-wide human capital management component of agency programs and resources. This approach was implemented as part of the agency's FY 2003 Planning, Budgeting, and Performance Management (PBPM) process. This established an agency-wide perspective for human capital management and facilitated an integrated and coordinated approach to human capital planning and budgeting for the future.

The agency is focusing on using all available personnel flexibilities and tools, and has obtained authorities for new measures (e.g., authority to waive dual compensation limitations) that have strengthened the agency's ability to meet staffing requirements. These initiatives include recruitment bonuses, increased entry-level hiring, retention incentives, waivers of dual compensation limitations, increases in higher level grades, double-encumbering of positions to insure knowledge transfer, and student loan repayment programs. The use of several new recruitment strategies resulted in a 54 percent increase over FY 1999 hiring, including more than triple the number of entry-level hires. The new recruitment techniques include authorized on-the-spot job offers, in selected circumstances; the personal involvement of NRC senior managers in campus visits; extensive up-front work in coordinating assessments of students' backgrounds prior to visiting targeted universities; and increased entry-level starting salaries to make them more competitive in the job market.

The agency has also implemented several new programs, including a Nuclear Safety Intern Program, a special Summer Hire Employment Program, the renewal of the Graduate Fellowship and Senior Fellowship programs, and the initiation of an undergraduate fellowship program.

The NRC is also focused on enhancing the capabilities of its existing staff to meet the agency's needs more effectively. The training and development of agency staff comprises three major areas: external training, in-house training and development, and management development.

In concert, these task areas support the mission-related need to facilitate workplace learning by ensuring that continuous learning opportunities are supported, promoted, and fully integrated into the organizational culture. Training and development are provided using the "systems approach to training" principles. The "systems approach to training" is a multi-phase program that includes training needs analysis, training program design and development, implementation, and program evaluation. The renewal of the Senior Fellowship and Graduate Fellowship programs, and the initiation of an Undergraduate Fellowship Program, are currently being developed. An SES Candidate Development Program and a new Leadership Potential Program have also been implemented to establish a qualified pool of candidates within the existing staff for future leadership and management positions.

Strategic Workforce Planning

As part of the agency's efforts in human capital management, a strategic workforce planning initiative was initiated in FY 2001. Early in FY 2001, an "Action Plan for Maintaining Core Competence," was developed that provided an approach for the implementation of a systematic strategic workforce planning process at NRC that would address core competency issues. This plan was provided to the Commission in late January 2001.

The pilot effort also focused on identifying some of the highly specialized scientific, engineering, and technical skills and competencies available in the agency, the skills and competencies needed over the next five years, and the gap closure strategies necessary for acquiring and maintaining the needed skills and competencies. Results of this pilot effort and the associated process are being reviewed to develop and implement an agency-wide strategic workforce planning process beginning in FY 2002. A web-based application is being developed to support the acquisition and reporting of staff skills and competencies.

Additionally, all agency offices have been asked to identify current and anticipated future critical skill and competency needs to begin the development of specific strategies to meet those needs and to establish a baseline for human capital management for the FY 2004 PBPM process. The strategic workforce planning process and initiative will support the agency's corporate management strategy to sustain a high-performing, diverse workforce, the achievement of the agency's programmatic strategic and performance goals, and will ensure that adequate attention is devoted to addressing and resolving core competency issues.

Information Technology and Information Management

Information is critical for the NRC's ability to perform effectively the agency's safety mission, and is regarded as being as essential to our success in achieving our goals. Recognizing this, NRC will continue development and standardization of agency Information Technology/Information Management (IT/IM) architectures and standards, as well as assess trends to identify opportunities to apply technology to improve our processes and performance.

In addition, NRC's computer security program continues to be designed and conducted in recognition of Federal laws and regulations and Administration direction. These program activities implement administrative, technical, and physical security measures for the protection of the agency's information, automated information systems, and information technology, which includes special safeguards to protect classified information, unclassified safeguards information, and sensitive unclassified information that is processed, stored, or produced in all automated information systems.

Additionally, in response to recommendations to strengthen the agency's IT security program under the Government Information Security Reform Act, NRC developed a corrective action plan, which includes hiring a senior-level official responsible for overseeing the IT Security pro-

gram, establishing a centralized monitoring and reporting function, developing program-level and system-level performance measures, and establishing IT security training requirements.

Consistent with and supportive of the emphasis placed on electronic government in the President's Management Agenda, NRC continues to make important strides in utilizing electronic and technological solutions to make it simpler for citizens to receive high-quality service from the NRC while reducing the cost of delivering those services.

Information resources and management activities support the agency's mission and programs through ongoing development, integration, and support of the agency's IT infrastructure and IM services.

During FY 2001, NRC strengthened computer security defense program to monitor and protect against the continued threat of cyber attacks on agency systems. NRC network administrators monitored the local and wide-area network for attacks and probes. NRC updated its existing desktop anti-virus detection/protection tools and anti-virus checker at the NRC E-Mail and Internet, and provided periodic Network Virus Alerts. Also, the agency distributed anti-virus software for employees to use on their home computers to help limit the transmission of viruses in either direction. No business functions have been compromised due to cyber attacks, or natural or man-made disasters.

The NRC launched the Electronic Information Exchange (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 NRC over the Internet in a way that ensures the documents will have legal standing in any hearing. EIE also gives NRC the opportunity to realize internal processing efficiencies and allow licensees to leverage the Internet to reduce regulatory burden by eliminating the creation and handling of paper-based documents.

For NRC to be effective and efficient in the IT/IM program, we have established several output measures to gauge our success in providing support services to our internal stakeholders, the NRC staff personnel. For example, we established measures such as the availability of key infrastructure services and availability of agency network servers for NRC staff personnel. In FY 2001, we achieved a result of 99.6 percent and 99.8 percent respectively. The graph on "Availability of IT/IM Services" displays our results for FY 1999-2001.

Administrative Support

One of the NRC's corporate management strategies is to acquire goods and services in an efficient manner. We have continued our strong emphasis on NRC's procurement reinvention efforts 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 Federal Activities Inventory Reform Act, performance-based contracting, and the posting of procurement synopses on the Internet.

The NRC's corporate management strategy to provide information management and information technology services encompasses the government-wide reform to expand the applications of on-line procurement and other E-government services and information. Supporting strategies directly address improving our ability to conduct business electronically and providing access to external stakeholders to publicly available information. The NRC will continue to post all synopses for acquisition valued at over $25,000 for which widespread notice is required and all associated solicitations unless covered by an exemption in the Federal Acquisition Regulation on the government-wide point-of-entry website.

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, whose primary goal 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. It 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.

During FY 2001, the NRC completed a major procurement reform initiative entitled, "Focused Source Selection," under the NRC's Procurement Reinvention Laboratory. The project, which involves early posting of the scope of work during a pre-solicitation phase and an early assessment of bidder capabilities, had a significant impact on the agency's mission by successfully promoting acquisition efficiency and fairness without sacrificing the quality of services needed by the NRC staff. For example, procurement acquisition lead time decreased by more than fifty days.

The NRC continued to implement performance-based contracts for facility management services, data entry, and other support services. The NRC includes such factors as measurable performance requirements, quality standards, quality surveillance plans, and provisions for reduction of fee or price when services are not performed to provide vendors with a better understanding of contract requirements.

The NRC also continued to expand the application of on-line procurement in FY 2001 by publicizing its business opportunities and posting its solicitations electronically on a single, easy to access and easy to use Governmentwide Internet location, . In addition, the agency streamlined its paper-intensive ordering and payment functions through increased use of the BankCard.

Chapter V: FY 2001 Audited Financial Statements

Limitations of the Financial Statements

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

The NRC's FY 2001 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, DC 20555-0001

February 11, 2002

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 2001 FINANCIAL STATEMENTS (OIG-02-A-08)

Attached is the independent auditors' report on the U.S. Nuclear Regulatory Commission's (NRC) financial statements for the years ended September 30, 2001 and 2000. 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 were obtained from the Chief Financial Officer (CFO) and 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 the lack of managerial cost accounting and inadequate accounting for internal use software as material weaknesses.[1]

The auditors identified two new reportable conditions and closed four prior-year reportable conditions. The new conditions concern accounting for internal use software and contract close-out procedures.

The report on NRC's compliance with laws and regulations disclosed three 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 is NRC is in substantial non-compliance with the Federal Financial Management Improvement Act of 1996 (FFMIA). The specific issues related to FFMIA are that managerial cost accounting was not implemented, as required, and that the agency did not adequately account for internal use software.

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

The prior year's reportable condition relating to the Debt Collection Improvement Act is closed. The condition relating to business continuity plans for the general ledger system remains in substantial noncompliance with FFMIA. However, NRC was dependent on the Department of the Treasury to resolve this condition. During FY 2002, NRC plans to transfer its accounting system to a new provider. 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. On February 23, 2001, OIG issued a separate report on the validity and reliability of NRC's performance information.[2] The report noted that many efforts to improve internal controls and the reliability (e.g. completeness, timeliness) of performance data were underway during FY 2001. These efforts should improve the validity and reliability of NRC's data. During FY 2002, OIG will evaluate the effect of these improvements on specific performance data reported by NRC.

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 action during FY 2002.

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

[2] OIG Report OIG-01-A-03, *Government Performance and Results Act: Review of the Fiscal Year 1999 Performance Report*, February 23, 2001.

R. Navarro & Associates, Inc.

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

INDEPENDENT AUDITORS' REPORT

We have audited the accompanying balance sheets of the U.S. Nuclear Regulatory Commission (NRC) as of September 30, 2001 and 2000, 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 audits provide a reasonable basis for our opinion.

MATTERS FOR EMPHASIS

Classification of Costs

OMB Bulletin 97-01, Form and Content of Agency Financial Statements, as amended, and applicable sections of OMB Bulletin 01-09, provide 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, rather than who received the benefits. This presentation does not entirely incorporate the guidance in the Bulletin, however, OMB's guidance enables the Agency to transition to the required presentation.

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 reimbursed expenses of

approximately $46.6 and $57.7 million, respectively for the years ended September 30, 2001 and 2000. 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, 2001 and 2000, 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.I. to the financial statements, NRC adopted Statement of Federal Financial Accounting Standards No. 10, Accounting for Internal Use Software. The adoption of this standard has a material effect on the comparability of the financial statements.

Our audits were conducted for the purpose of forming an opinion on the financial statements taken as a whole. The Management Discussion and Analysis, contained in Chapter II, and the required supplementary information, page 85, are not a required part of the financial statements but are information required by OMB Bulletin No. 97-01, Form and Content of Agency Financial Statements, as amended, and applicable sections of OMB Bulletin 01-09. 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 January 16, 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.

R. Navarro & Associates, Inc.

January 16, 2002

BALANCE SHEET
(Dollars in Thousands)

As of September 30	**2001**	2000
Assets		
Intragovernmental assets:		
Fund balances with Treasury (Note 2)	**$140,465**	$138,740
Accounts receivable (Note 3)	**2,549**	1,874
Other	**1,144**	1,225
Total Intragovernmental Assets	**144,158**	141,839
Cash and other monetary assets	**20**	20
Accounts receivable, net (Note 3)	**48,905**	42,163
Property and equipment, net (Note 4)	**43,788**	41,853
Other	**15**	51
Total Assets	**$236,886**	$225,926
Liabilities		
Intragovernmental liabilities:		
Accounts payable	**$12,734**	$10,591
Other (Notes 5 and 6)	**56,411**	50,157
Total Intragovernmental Liabilities	**69,145**	60,748
Accounts payable	**15,859**	15,860
Federal employees benefits (Notes 1.K. and 6)	**10,849**	8,230
Other (Notes 5)	**47,501**	44,937
Total Liabilities	**143,354**	129,775
Net Position		
Unexpended appropriations (Note 8)	**86,839**	87,073
Cumulative results of operations (Note 9)	**6,693**	9,078
Total Net Position	**93,532**	96,151
Total Liabilities and Net Position	**$236,886**	$225,926

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

STATEMENT OF NET COST
(Dollars in Thousands)

For the year ended September 30	**2001**	2000
Nuclear Reactor Safety		
Intragovernmental	**$101,541**	$103,796
With the public	**233,995**	226,621
Total cost	**335,536**	330,417
Less earned revenue	**(393,333)**	(390,401)
Net Cost of Nuclear Reactor Safety	**(57,797)**	(59,984)
Nuclear Materials Safety		
Intragovernmental	**19,851**	17,873
With the public	**59,292**	62,812
Total cost	**79,143**	80,685
Less earned revenue	**(49,778)**	(51,677)
Net Cost of Nuclear Materials Safety	**29,365**	29,008
Nuclear Waste Safety		
Intragovernmental	**24,160**	24,691
With the public	**61,931**	59,010
Total cost	**86,091**	83,701
Less earned revenue	**(18,636)**	(17,882)
Net Cost of Nuclear Waste Safety	**67,455**	65,819
International Nuclear Safety Support		
Intragovernmental	**6,151**	7,892
With the public	**7,695**	8,034
Total cost	**13,846**	15,926
Less earned revenue	**(2,233)**	(3,078)
Net Cost of International Nuclear Safety Support	**11,613**	12,848
Net Cost of Operations	**$50,636**	$47,691

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

STATEMENT OF CHANGES IN NET POSITION
(Dollars in Thousands)

For the year ended September 30	**2001**	2000
Net Cost of Operations	**$(50,636)**	$(47,691)
Financing sources other than exchange revenue (Note 12)		
Appropriations used	**31,042**	26,120
Non-exchange revenue	**657**	875
Imputed financing	**17,209**	16,033
Transfers-in	**453,348**	447,000
Transfers-out	**(454,005)**	(447,875)
Total Financing Sources	**48,251**	42,153
Net Results of Operations	**(2,385)**	(5,538)
Increase (Decrease) in unexpended appropriations	**(234)**	(16,177)
Change in Net Position	**(2,619)**	(21,715)
Net Position - Beginning of Period	**96,151**	116,553
Prior-period adjustment (Note 13)	**–**	1,313
Net Position	**96,151**	117,866
Net Position - End of Period	**$93,532**	$96,151

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

STATEMENT OF BUDGETARY RESOURCES
(Dollars in Thousands)

For the year ended September 30	**2001**	2000
Budgetary Resources		
Budget authority	**$490,228**	$471,975
Unobligated balances - beginning of period	**30,377**	29,894
Spending authority from offsetting collections	**4,152**	5,517
Adjustments	**7,451**	8,525
Total Budgetary Resources	**532,208**	515,911
Status of Budgetary Resources		
Obligations incurred	**503,304**	485,534
Unobligated balances - available	**28,317**	29,787
Unobligated balances - not available	**587**	590
Total Status of Budgetary Resources	**532,208**	515,911
Outlays		
Obligations incurred	**503,304**	485,534
Less: Spending authority from offsetting collections and adjustments	**(11,630)**	(14,129)
Subtotal	**491,674**	471,405
Obligated balances, net - beginning of period	**104,044**	116,583
Less: obligated balance, net - end of period	**(108,704)**	(104,044)
Total Outlays	**$487,014**	$483,944

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

STATEMENT OF FINANCING
(Dollars in Thousands)

For the year ended September 30	**2001**	2000
Obligations and Nonbudgetary Resources		
Obligations incurred	**$503,304**	$485,533
Less: Spending authority for offsetting collections and adjustments	**(11,630)**	(14,129)
Imputed financing (Note 12)	**17,209**	16,033
Transfers - in (Note 12)	**453,348**	447,000
Transfers - out (Note 12)	**(453,348)**	(447,000)
Exchange revenues not in the budget (Note 10)	**(459,392)**	(457,944)
Total Obligations and Nonbudgetary Resources	**49,491**	29,493
Resources Not Funding Net Cost of Operations		
Change in undelivered orders	**(1,239)**	12,660
Capitalized costs	**(11,072)**	(6,683)
Other	**2,258**	520
Total Obligations and Nonbudgetary Resources	**(10,053)**	6,497
Costs Not Requiring Resources		
Depreciation and amortization	**7,474**	6,536
Total Costs Not Requiring Resources	**7,474**	6,536
Financing Sources Yet to be Provided	**3,724**	5,165
Net Cost of Operations	**$50,636**	$47,691

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

NOTES TO PRINCIPAL STATEMENTS

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A. *Reporting Entity*

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

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

B. *Basis of Presentation*

These principal statements were prepared to report the financial position and results of operations of the NRC as required by the Chief Financial Officers Act of 1990 and the Government Management Reform Act of 1994. These financial statements were prepared from the books and records of the NRC in conformity with accounting principles generally accepted in the United States of America, the requirements of Office of Management and Budget (OMB) Bulletin Nos. 97-01 and 01-09, Form and Content of Agency Financial Statements, technical amendments, and NRC accounting policies. These statements are, therefore, different from the financial reports, also prepared by the NRC pursuant to OMB directives, which are used to monitor and control NRC's use of budgetary resources. NRC has not 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 encompasses all NRC efforts to ensure that civilian nuclear power reactor facilities, as well as non-power reactors, are operated 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 Materials Safety encompasses NRC efforts to ensure that NRC-regulation aspects of nuclear fuel cycle facilities and nuclear materials activities are handled in a manner that provides adequate protection of public health and safety.

Nuclear Waste Safety encompasses NRC's regulatory activities associated with uranium recovery, decommissioning, storage of spent nuclear fuel, transportation of radioactive materials, and disposal of radioactive wastes.

International Nuclear Safety Support encompasses NRC's efforts of international cooperation to help ensure the safe, secure, and environmentally acceptable uses of nuclear energy.

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 27 years, Congress has enacted no-year appropriations, which are available for obligation by NRC until expended. The Energy and Water Development Appropriations Act, 2001, required the NRC to recover approximately 98 percent of its new budget authority of $487.2 million by assessing fees less amounts derived from the Nuclear Waste Fund of $21.6 million and $3.2 million from the General Fund. For FY 2000, the NRC recovered approximately 100 percent of its new budget authority of $469.9 million, as required by the Omnibus Budget Reconciliation Act (OBRA) of 1990, as amended, less $19.2 million derived from the Nuclear Waste Fund and $3.8 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

NOTES TO PRINCIPAL STATEMENTS

of new budget authority for the year. Collections which exceed the new budget authority are held to offset subsequent years' appropriations. Appropriations expended for property and equipment are recognized as expenses when the asset is consumed in operations (depreciation and amortization).

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

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

G. Accounts Receivable

Accounts receivable consist of amounts owed to the NRC by other Federal agencies and the public. Amounts due from the public are presented net of an allowance for 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 $133 thousand and $214 thousand at September 30, 2001, and 2000, and consists 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 in the next fiscal year. Also included in these amounts are contract 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 in a subsequent fiscal year.

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, 2001, and 2000.

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 were 5.21 percent in year 1 and 5.21 percent in year 2 and thereafter.

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.

NOTES TO PRINCIPAL 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). During FY 2001, for 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. During FY 2000, for employees belonging to FERS, the NRC withheld 1.2 percent of base pay earnings and matched the withholding with a 10.7 percent contribution. The sum was transferred to the Federal Employees Retirement Fund. During FY 2001, for employees covered by CSRS, NRC withheld 7 percent of base pay earnings. This withholding was matched by NRC with an 8.51 percent contribution. During FY 2000, for employees belonging to CSRS, NRC withheld 7.4 percent of base pay earnings. This withholding was matched by NRC with a 8.51 percent contribution, and the sum of the withholding and the match was transferred to the CSRS.

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 percentages of base pay that an employee participating in FERS may contribute was 10 percent in calendar year (CY) 2000. In CY 2001 the maximum rate was 10 percent through June 30, 2001 and 11 percent thereafter. Employees belonging to CSRS were able to contribute a maximum of 5 percent during CY 2000. In CY 2001 they were allowed to contribute 5 percent through June 30, 2001, and 6 percent thereafter. CSRS contributions made were of their base pay, and there is no NRC matching of the contribution. The maximum amount that either FERS or CSRS employees may contribute to the plan was $10.5 thousand in CY 2001 and CY 2000. 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 equip-

ment, 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 offices 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 On-Line Payment and Collection (OPAC) System. The OPAC 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)	**2001**	2000
Fund Balances		
Appropriated funds	$137,588	$134,402
Other fund types	2,877	4,338
Total	$140,465	$138,740
Status of Fund Balance with Treasury		
Unobligated Balance		
Available	$31,194	$34,125
Unavailable	587	590
Obligated balance not yet disbursed	108,684	104,025
Total	$140,465	$138,740

NOTE 3. ACCOUNTS RECEIVABLE

(In thousands)	**2001**	2000
Intragovernmental		
Receivables and reimbursements	$2,549	$1,874
Receivables with the Public		
Materials and facilities fees - billed	$10,445	$5,419
Materials and facilities fees - unbilled	41,300	39,864
Other (Penalties and Interest)	222	359
Total Accounts Receivable	51,967	45,642
Less: Allowance for uncollectible accounts	(3,062)	(3,479)
Accounts Receivable, Net	$48,905	$42,163

NOTE 4. PROPERTY AND EQUIPMENT, NET

(In thousands)

Fixed Assets Class	Service Years	Acquisition Value	Accumulated Depreciation and Amortization	2001 Net Book Value	2000 Net Book Value
Equipment	5-8	$19,191	$(16,372)	$2,819	$3,315
ADP software	5	48,712	(34,237)	14,475	18,112
ADP software under development	–	14,708	–	14,708	7,738
Leasehold improvements	20	19,725	(8,096)	11,629	12,593
Leasehold improvements in progress	–	157	–	157	95
		$102,493	$(58,705)	$43,788	$41,853

NOTE 5. OTHER LIABILITIES

(In thousands)	2001	2000
Liability to offset net accounts receivable for fees assessed	$50,813	$43,388
Liability from fees collected which will offset subsequent years' appropriations	1,724	3,173
Liability to offset miscellaneous accounts receivable	133	214
Advances from other Federal agencies	–	22
Accrued workers' compensation	1,780	1,521
Employee benefit contributions	1,961	1,839
Total Intragovernmental Other Liabilities	$56,411	$50,157

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)	2001	2000
Accrued annual leave	$26,473	$25,627
Accrued salaries	16,143	14,303
Contract holdbacks, advances, and other	4,885	5,007
Total Other Liabilities	$47,501	$44,937

All 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)	2001	2000
Intragovernmental		
FECA paid by DOL	$1,780	$1,521
Federal Employee Benefits		
Future FECA	10,849	8,230
Other		
Accrued annual leave	26,473	25,626
Capital lease liability	167	181
Total Liabilities not Covered by Budgetary Resources	$39,269	$35,558

NOTE 7. LEASES

Future Lease Payments Due:

Fiscal Year	Capital	Operating	2001	2000
2001	$ –	$ –	$ –	$20,170
2002	89	19,509	19,598	19,477
2003	76	19,474	19,550	19,418
2004	2	19,563	19,565	19,457
2005 and thereafter	–	158,255	158,255	158,190
Total	167	216,801	216,968	236,712
Less: imputed interest	(9)	–	(9)	(12)
Total Future Lease Payments	$158	$216,801	$216,959	$236,700

NOTE 8. UNEXPENDED APPROPRIATIONS

(In thousands)	2001	2000
Unobligated	$18,493	$18,711
Undelivered orders	68,346	68,362
Total Unexpended Appropriations	$86,839	$87,073

Undelivered orders are amounts which have been obligated but not yet expended. The unobligated appropriations balance does not include $2,933 thousand and $3,054 thousand in unfilled customer orders - unobligated as of September 30, 2001, and September 30, 2000, respectively. The undelivered orders balance does not include $1,966 thousand and $2,886 thousand in unfilled customer orders - obligated as of September 30, 2001, and September 30, 2000, respectively.

NOTE 9. CUMULATIVE RESULTS OF OPERATIONS

(In thousands)	**2001**	2000
Future funding requirements	$(39,102)	$(35,377)
Investment in property and equipment, net	43,788	41,853
Contributions from foreign cooperative research agreements	1,984	2,506
Other	23	96
Cumulative Results of Operations	$6,693	$9,078

Future funding requirements represent the amount of future funding needed to pay the accrued unfunded expenses as of September 30, 2001, and 2000. 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 10. EXCHANGE REVENUES

(In thousands)	**2001**	2000
Fees for licensing, inspection, and other services	$459,392	$457,944
Revenue from reimbursable work	4,589	5,094
Total Exchange Revenues	$463,981	$463,038

NOTE 11. BUDGET FUNCTIONAL CLASSIFICATION

(In thousands)			**2001**	2000
Functional Classification	**Gross Cost**	**Earned Revenue**	**Net Cost**	**Net Cost**
276 - Energy Information, Policy, & Regulation	$511,644	$(463,792)	$47,852	$44,441
151 - AID International Affairs	$2,972	$(188)	$2,784	$3,249
800 - GSA General Government	–	–	–	1
Total	$514,616	$(463,980)	$50,636	$47,691

NOTES TO PRINCIPAL STATEMENTS

NOTE 11. BUDGET FUNCTIONAL CLASSIFICATION (continued)

Intragovernmental

(In thousands)			2001	2000
Functional Classification	**Gross Cost**	**Earned Revenue**	**Net Cost**	**Net Cost**
276 - Energy Information, Policy, & Regulation	$149,865	$(29,241)	$120,624	$121,001
151 - AID International Affairs	1,838	$(188)	1,650	2,171
Total	$151,703	$(29,429)	$122,274	$123,172

NOTE 12. FINANCING SOURCES OTHER THAN EXCHANGE REVENUE

Appropriations Used

Appropriations used is recognized to the extent that appropriated funds have been consumed less the amount collected from fees assessed for licensing, inspections, and other services.

(In thousands)	2001	2000
Fees collected	$455,044	$450,077
Less: collection from fees assessed	(453,348)	(447,000)
Collected Fees Available to Offset Subsequent Years' Appropriations	$1,696	$3,077

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

(In thousands)	2001	2000
Appropriated funds consumed	$490,434	$484,064
Less: collection from fees assessed	(453,348)	(447,000)
Subtotal	37,086	37,064
Amounts to offset subsequent years' appropriations	6,044)	(10,944)
Appropriations Used	$31,042	$26,120

Appropriated funds consumed includes $30,377 thousand for FY 2001 and $29,894 thousand for FY 2000 of available funds from prior years.

Non-Exchange Revenue

(In thousands)	**2001**	2000
Civil penalties	$345	$632
Miscellaneous receipts	312	243
Total Non-Exchange Revenue	$657	$875

Imputed Financing

(In thousands)	**2001**	2000
Civil Service Retirement System	$9,676	$9,173
Federal Employee Health Benefit	7,486	6,807
Federal Employee Group Life Insurance	47	45
U.S. Treasury Judgement Fund	–	8
Total Imputed Financing	$17,209	$16,033

Transfers In/Out

(In thousands)	**2001**	2000
Transfers in from Treasury	$453,348	$447,000
Transfers out to Treasury		
License Fees	453,348	447,000
Non-exchange revenue	657	875
Total Transfer-Out to Treasury	$454,005	$447,875

NOTE 13. PRIOR-PERIOD ADJUSTMENT

The prior-period adjustment reported in FY 2000 of $1,313 thousand consists of the net value of computer hardware components received in FY 1999 by NRC but not capitalized as other assets, equipment not in use. The assets were placed into operation during FY 2000. The impact of this adjustment was to increase property and equipment, net, and cumulative results of operations as of September 30, 1999, by $1,313 thousand.

NOTE 14. RECLASSIFICATIONS

Certain prior-year amounts have been reclassified to conform to the current year presentation.

NOTES TO PRINCIPAL STATEMENTS

NOTE 15. SUMMARY OF BUDGETARY RESOURCES

(In thousands)	2001				2000
Budgetary Resources	**X0200**	**X0300**	**All Other**	**Total**	Total
Budget authority	$481,766	$5,500	$2,962	$490,228	$471,975
Unobligated balances - beginning of period	27,682	898	1,797	30,377	29,894
Spending authority from offsetting collections	4,152	–	–	4,152	5,517
Adjustments	7,156	279	16	7,451	8,525
Total Budgetary Resources	$520,756	$6,677	$4,775	$532,208	$515,911
Status of Budgetary Resources:					
Obligations incurred	$494,730	$5,956	$2,618	$503,304	485,534
Unobligated balances - available	26,026	721	1,570	28,317	29,787
Unobligated balances - not available	–	–	587	587	590
Total Status of Budgetary Resources	$520,756	$6,677	$4,775	$532,208	$515,911
Outlays:					
Obligations incurred	$494,730	$5,956	$2,618	$503,304	$485,534
Less: Spending authority from offsetting collections and adjustments	(11,335)	(279)	(16)	(11,630)	(14,129)
Obligated balance, net beginning of period	98,927	1,064	4,053	104,044	116,583
Less: Obligated balance, net end of period	(104,078)	(910)	(3,716)	(108,704)	(104,045)
Total Outlays	$478,244	$5,831	$2,939	$487,014	$483,943

The adjustments of $7,451 thousand for FY 2001 and $8,525 thousand for FY 2000 to budgetary resources above consist of recoveries to prior-year obligations less $27.3 thousand for FY 2001 and $87 thousand that was rescinded for FY 2000.

As of September 30	**2001**	2000
Intragovernmental Assets		
Fund Balance with Treasury		
Department of the Treasury	$140,465	$138,740
Accounts Receivable		
Tennessee Valley Authority	1,283	1,025
Department of Veterans Affairs	162	280
Department of Energy	817	225
Other Agencies	287	344
Total Accounts Receivable	2,549	1,874
Other Assets		
Department of Commerce	29	137
Department of Interior	486	171
Department of the Navy	11	209
Department of Labor	256	267
General Services Administration	329	326
Other Agencies	33	115
Total Other Assets	1,144	1,225
Total Intragovernmental Assets	$144,158	$141,839

As of September 30	**2001**	2000
Intragovernmental Liabilities		
Accounts Payable		
General Services Administration	$7,841	$5,182
Department of Energy	4,082	4,747
Other Agencies	811	662
Total Accounts Payable	12,734	10,591
Other Liabilities		
Department of Labor	1,781	1,521
Department of the Treasury - General Fund	52,670	46,775
Office of Personnel Management	1,960	1,839
Other Agencies	–	22
Total Other Liabilities	56,411	50,157
Total Intragovernmental Liabilities	$69,145	$60,748

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INDEPENDENT ACCOUNTANTS' REPORT ON MANAGEMENT'S ASSERTION ABOUT THE EFFECTIVENESS OF INTERNAL CONTROL AND INDEPENDENT AUDITORS' REPORT ON COMPLIANCE WITH LAWS AND REGULATIONS

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

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

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, 2001, 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, and accordingly, included 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 controls in place as of September 30, 2001.

Because of inherent limitations in internal control, misstatements due to 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, 2001 are in compliance with the internal control objectives defined in OMB Bulletin No. 01-02 is not fairly stated. Management did not identify the lack of managerial cost accounting, nor did they identify an adequate system to monitor the implementation of accounting for internal use software.

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 signifi-

cant 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 operation 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 and Accounting for Internal Use Software are considered material weaknesses. Both conditions are considered a substantial non-compliance with the Federal Financial Management Improvement Act (FFMIA).

Current Year Comments

A. Managerial Cost Accounting

Initially reported for fiscal year (FY) 1998 (Report No. OIG/98A-09) and continuing through FY 2001, the NRC has not implemented Statement of Federal Financial Accounting Standards (SFFAS) No. 4, Managerial Cost Accounting Concepts and Standards for the Federal Government, to assure that, "Managerial cost accounting... be a fundamental part of the financial management system and, to the extent practicable, ... [to] be integrated with other parts of the system." [Implementation of the standards would provide], "... the costs of ... activities on a regular basis for management information purposes."

Agency management has continued to respond to the FY 1998 condition by revising the remediation plan and outlining the milestones for an integrated resource management system. The remediation plan has undergone various revisions to reflect the tasks planned and accomplished. The most recent revision of the plan was issued May 31, 2001. Management has not made measurable progress in implementing interim techniques or processes to provide useful, routine and reliable cost information for managers as of the end of FY 2001. NRC projects implementation of cost management during FY 2002.

The strategy adopted by management places significant emphasis on changing the culture and practices of the agency. Although managements strategy included plans for interim cost reports at the strategic arena level, this strategy overlooks the immediate benefits of providing managerial cost accounting information to agency managers in order to support their responsibilities for planning, controlling costs, decision-making, and evaluating performance. For example, in the current year, the lack of cost accounting data impacted the agency's ability to transition smoothly to accounting for internal use software. (See Comment B for details of the condition and recommendation.)

The Joint Financial Management Improvement Program (JFMIP), Managerial Cost Accounting System Requirements (FFMSR-8), states, "Some agencies may find they have existing software, such as the core financial systems software and reporting and data analysis tools, that can support many of their needs for cost accounting capabilities, especially when cost

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accounting is first being introduced. Not until an agency has some experience with cost accounting and has determined that they truly have a need for more sophisticated capabilities and what those capabilities are, should the agency pursue additional software. Since agencies may use cost finding techniques and cost studies as long as they comply with cost accounting standards ... implementation of a cost accounting system is not necessarily a prerequisite with SFFAS Number 4."

This condition continues to be reported as a material weakness and an FFMIA substantial non-compliance.

Recommendation

1. The Chief Financial Officer (CFO) should give greater priority to implementing a cost management system within the revised milestones. The preparation of routine, useful and reliable cost accounting information for agency managers should become a higher priority. Cost accounting information should enhance the agency's ability to evaluate the cost of outputs.

CFO's Comments

"Agree. A high priority has been and will continue to be placed on implementing a cost management system within the revised milestones of the remediation plan, dated May 31, 2001. These milestones are linked to the implementation of the PeopleSoft payroll, time and labor, and human resources modules. The PeopleSoft modules were implemented on November 4, 2001. Some of the remediation plan milestones have been delayed due to the one month deferral of the implementation of the PeopleSoft modules beyond the time frame projected in May 2001 and by unforeseen increased efforts to resolve issues associated with the interfaces between the PeopleSoft modules and the cost accounting system. Cost management reports will be provided to offices for the first quarter of FY 2002 early in calendar year 2002."

Auditors' Position

We are fully cognizant of the initiatives, which have preceded the implementation of cost accounting and the importance of those initiatives to the agency. However, we continue to urge the CFO to meet the milestone dates in the revised remediation plan, as doing so will expedite and enhance the implementation of a cost management strategy for the agency. During the next audit we will evaluate the full implementation of cost management, and compliance with the remediation plan milestones. The condition is resolved.

B. Accounting for Internal Use Software

In 1998, the Federal Accounting Standards Advisory Board issued standards for agencies to account for the development of internal use software. The Statement became effective October 1, 2000. The guidance prompted the Chief Financial Officers' community to develop policy, redesign systems, designate documentation standards and develop an adoption strategy for the new accounting standard. The NRC, in a very timely and thorough fashion, developed policy guidance for adoption of the standard. However, the management controls

needed to ensure compliance were not satisfactorily implemented. Consequently, the agency cannot adequately demonstrate adoption of the accounting standard.

The Financial Accounting Standards Advisory Board Statement of Federal Financial Account Standards No. 10 (SFFAS No. 10) established the accounting standards for the cost of software developed or obtained for internal use. Paragraph 16 requires that, "For internally developed software, capitalized cost should include the full cost (direct and indirect cost) incurred during the software development stage." For internally developed software, "Such costs include those for new software (e.g., salaries of programmers, systems analysts, project managers, and administrative personnel; associated employee benefits; outside consultants' fees; rent; and supplies) . . ." The General Accounting Office's, Standards for Internal Control in the Federal Government, states "Internal control should generally be designed to assure that ongoing monitoring occurs in the course of normal operations. It is performed continuously and is ingrained in the agency's operations. It includes regular management and supervisory activities, comparisons, reconciliations, and other actions people take in performing their duties."

The agency's policy is to track and capture labor costs by strategic arena. To separately account for labor costs related to internal use software development, the agency established an "unofficial" information technology (IT) strategic arena, as they did in prior years to track management and support costs. Within the IT arena, job codes were established for each individual software development project. Employees working on software development projects were instructed to charge their time to the IT arena by entering time in the time and labor module of the payroll system. That system contained an IT detail screen for charging time to individual projects.

The new arena was deployed in a software "patch" to the Pay/Pers time and labor module (T&L). However, OCFO failed to include certain functions, thoroughly test the new routine, and develop reports to enable management review and oversight of the new cost accumulation process. For example, when an employee generally charges all time to a single arena, the employee's time defaults to that arena. In this instance, the system generates a one-page time and attendance (T&A) report that the employee and certifying official sign. However, when an employee charges time to more than one arena, the system generates a two-page T&A report so that the employee and certifying official can see the hours charged to each arena. The T&A report also indicates that the default arena was modified. Thus, the hours shown on the T&A report and hours charged in the system agreed.

However, the IT "patch" did not generate a second T&A report page when IT was one of two strategic arenas involved, and the hours shown on the printed T&A reports continued to be charged to the default arena. Consequently, many of the sampled T&A reports, signed by employees and certifying officials, did not agree with the hours reflected in the system. In an effort to address this condition, the agency provided other alternative documentation to support hours charged to the IT arena, such as all T&A reports for selected employees, functional position descriptions, monthly activity reports for IT projects, personal calendars, annual employee performance appraisals, and other documents of varying evidentiary value.

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Other examples of the condition identified include:

- Another shortcoming of the "patch" was that a system edit was not provided to require completion of the IT detail screen when hours were charged to the IT arena. Thus, hours could be charged to the general IT arena without specifying the job code to which the costs should be assigned.
- Labor reports were not distributed to the Project Managers until March 2001, and, at that time, the agency did not require them to certify the accuracy of the hours reported.
- OCFO personnel did not timely monitor the implementation of the IT labor time tracking process. During the third quarter of FY 2001, the OCFO performed a review of employee hours charged to IT. OCFO personnel discovered that IT hours were being under reported. Further analysis revealed that some employees were not charging hours to the IT arena because they believed that the projects they were working on did not meet the requirements of SFFAS No. 10. Other employees were not charging the IT arena because of an oversight. In October 2001, OCFO requested the Project Managers to certify the time reported. However, certification at that late date was considered untimely and unreliable.

Because the agency did not have an adequate system to (1) track the labor time incurred or (2) monitor procedures to implement SFFAS 10, the agency is not in compliance with accounting standards.

Recommendation:

2. The Chief Financial Officer should review the agency practices for transitioning to new software applications or routines, which have financial statement impact. The following are essential to the deployment of new applications:

   - adequacy of testing the process controls,
   - developing the control activities necessary to ensure reasonable assurance in the process,
   - monitoring the implementation of the application and development of managerial reports to assist the review, and
   - reconciling the data provided by the new process.

   Implementation of business practices of this nature could assist the OCFO with deployment of other applications in the future.

CFO's Comments

"Agree. The OCFO will review the practices for transitioning to new software applications or routines that have financial statement impact. On November 4, 2001, the agency implemented the PeopleSoft Human Resources Management System. This new system integrates human resources, payroll, and time and labor, and is a single-entry system for time, attendance and labor reporting. This new system is expected to correct all of the system weaknesses identified in the Payroll/Personnel System. The staff is currently extracting IT labor data from the new Time and Labor module so we can monitor IT labor reporting. The staff plans to issue first quarter labor data to IT project managers by the end of February 2002 for

their review and certification. This completes all remediation actions required by the Federal Financial Management Improvement Act."

Auditors' Position

The activities described by the CFO should enable the agency to evaluate the appropriateness of new software applications implemented. Furthermore, the CFO's planned actions described timeliness of data extracts and related monitoring and analysis may enhance the reliability of financial information provided by the system and provide an early warning system in the event that issues are identified. We concur that such actions should be pursued as means to remediate the FFMIA condition identified. This condition is resolved. Closure is dependent on an evaluation of actions taken and the reliability of data provided by the new application.

C. Contract Close-out Processing Procedures

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 the amounts that are available for deobligation. This process is normally followed to determine the continued viability of recorded undelivered orders. We noted that DCPM notified OCFO's General Accounting Branch (GAB) of amounts to be expensed without adequate supporting documentation. Subsequently, GAB recognized the expense without adequate supporting documentation such as contractor invoices, receiving reports or project manager certifications that the services had been performed.

Statement of Federal Financial Accounting Standards No. 5, which established accounting standards for federal government liabilities, contains the following definition, "A liability for federal accounting purposes is a probable future outflow or other sacrifice of resources as a result of past transactions or events. . ." NRC's Accounting Policy Manual, Chapter II. E., Accounting Procedures, states, "The documentation of a financial event shall be purposeful and useful to managers in controlling their operations and to auditors or others involved in analyzing operations. The documentation shall provide a link between the SGL [standard general ledger] and all supporting records for the financial event."

Information provided by DCPM for transaction processing was not reviewed by GAB personnel to ensure the underlying completeness, necessity and propriety of the entry. The present practice used by GAB does not require adequate supporting documentation for the amount proposed as an accrual for contracts in close-out. As a result, the amounts presented on the financial statements for liabilities and expenses may be overstated. The amount in contracts in close-out at year-end was approximately $705,000.

Recommendation:

3. The Chief Financial Officer should instruct the General Accounting Branch of their inherent responsibility to evaluate amounts being recorded as liabilities and expenses. It is essential that the review process include an understanding of the source of the information and the underlying techniques used to develop amounts referred for inclusion in the agency's financial records. At a minimum, OCFO should require DCPM to provide documentation to justify valid expenses and liabilities.

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CFO's Comments

"Agree. The General Accounting Branch will ensure that all expenses recorded for contracts in closeout are supported by adequate documentation and will work with DCPM to obtain the necessary documentation."

Auditors' Position:

We commend the CFO for his commitment to the actions described. The condition is resolved. During a subsequent audit we will evaluate the adequacy of actions taken.

Status of Prior Years' Comments

A. Program Cost Accounting

In FY 1999, we reported (Report No. OIG/99A-12) that NRC did not have a general ledger process supporting the preparation of the Statement of Net Cost. The OCFO implemented an interim labor distribution system in FY 2000 by strategic arena in an effort to collect labor data. A follow-up analysis of the data available for allocation and distribution of labor cost was performed in the current year. The analysis showed that the new system sufficiently improved the information collection process. This condition is closed.

B. Documentation of Debt Collection Activities

The License Fee and Accounts Receivable Branch (LFARB) is responsible for collecting NRC receivables generated in the billing of NRC services to the regulated community. Policies provide for the collection actions at specified time periods. In FY 2000, we reported that collection files were generally in poor condition and were incomplete. The results of tests indicated that required collection actions were either not performed, or were not documented for a large portion of the billings. In the current year the agency implemented a "Red Folder" process, whereby tracking and documentation of files can be managed more fully. Thus, the condition is closed.

C. Management Controls over Fee Development

During FY 1999, an audit was conducted by the Office of the Inspector General (OIG) that identified management control issues relating to the development of fees (Report No. OIG/99A-01). The OIG identified several management control weaknesses, including: (1) lack of formal procedures and (2) the lack of quality control over the fee calculations. The report stated that there were no formally documented procedures for calculating fees and preparing the fee rule.

In October 1999 (FY 2000), the agency engaged a contractor to conduct an analysis of the fee development methodology. In a report dated March 27, 2000, the contractor concluded that although NRC's current hourly rate calculation is not as precise as it could be, it is acceptable under SFFAS No. 4, Managerial Cost Accounting Concepts and Standards for the Federal Government. The report also provided suggestions that would improve the current process.

Quality controls were not addressed specifically in the report. A subsequent OIG assessment of quality control procedures over fee development disclosed that improved controls were instituted. This condition is closed.

D. Financial Statement Preparation

The FY 1998 management letter included an observation on the Financial Statement Preparation Process, and in FY 1999 this issue was elevated to a reportable condition. During FY 2000, the NRC improved its financial management compilation practices as evidenced by delivering the compiled statements by the agreed-upon milestone. In the current year, the agency further refined its compilation process, as evidenced by timely delivery of the principal statements and notes. More importantly, the agency was able to meet the delivery milestones. The condition is closed.

E. Management Controls Over Small Entity Certifications

As reported in prior years, materials licensees can qualify as small entities and pay reduced annual fees depending on their size (per 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. Size standards are based on guidelines prescribed by the Small Business Administration. 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.

Licensees self-certify as small entities and corroborating evidence is not required. The OCFO performs a cursory review of NRC Forms 526 received, primarily for completeness. A few certifications are denied each year based on information available to license fee analysts. During FY 1999, the agency granted 1,180 fee reductions totaling $6.4 million or 83 percent from the originally billed materials fees of $7.7 million. The agency granted fee reductions of approximately $5.2 and $5.8 million for FY 2001 and FY 2000, respectively.

The CFO responded in the prior year that they planned to explore the recommendation provided and that they would advise us of their results by June 1, 2000. As of the end of our FY 2001 field work, a corrective action plan had not been provided for review. On December 7, 2001, the agency issued a memorandum documenting an approach that will be used for FY 2002. Since a plan was not implemented to address this condition in FY 2001, the condition remains unresolved.

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.

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INDEPENDENT AUDITORS' REPORT ON COMPLIANCE WITH LAWS AND REGULATIONS

We have audited the principal statements of the U.S. Nuclear Regulatory Commission (NRC) as of and for the year ended September 30, 2001, and have issued our report thereon dated January 16, 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.

The results of our tests of compliance with the laws and regulations described in the preceding paragraph, exclusive of FFMIA, disclosed an instance of noncompliance with the following laws and regulations that are required to be reported under *Government Auditing Standards* and OMB Bulletin No. 01-02, which is described below.

Current Year Comment

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. The review evaluated the extent of compliance with Executive Order 13103, Computer Software Piracy, which requires all executive agencies to ensure compliance with applicable copyright laws.

The report identified two conditions evidencing weaknesses in the agency's current practices:

- NRC Management Directives do not address the full scope of the executive order.
- The agency's software management controls do not implement the Chief Information Officer (CIO) Council's guidelines.

NRC's policies and procedures do not address the full scope of the executive order because the NRC focused its actions on personal use, rather than all uses of software. As a result, the NRC has not conducted an initial assessment of its software, established a baseline for software inventory, or determined if all software on agency computers is authorized. The OIG further concluded that these conditions place the agency, its employees and contractors at risk.

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Recommendation:

Refer to the OIG report for detailed description of the conditions and recommendations. Follow-up and resolution actions will be tracked by OIG.

Status of Prior Years' Comments

A. Compliance with the Debt Collection Improvement Act

In the prior year, we reported that the NRC did not comply fully with the referral provisions of the Debt Collection Improvement Act. Uncollected receivables that are over 180 days delinquent are required to be transferred to the U.S. Treasury. The results of our tests of accounts receivable identified a 60 percent exception rate for accounts that were outstanding for more than 180 days. In the current year, the agency implemented a "Red Folder" process, whereby tracking and documentation of files can be managed more fully. Thus, the condition is closed.

B. Part 170 Hourly Rates

As previously reported in fiscal years (FY) 1998 through 2000, the Omnibus Budget Reconciliation Act (OBRA) of 1990 requires the NRC to recover approximately 100 percent of its budget authority by assessing fees. 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 the time incurred by NRC personnel in providing Part 170 services. 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. For example, the calculations did not include certain contract support costs of approximately $70 million, net of contract support costs directly billable to licensees and applicants. The $70 million represented approximately 15 percent of the FY 1998 NRC appropriation of $472.8 million.

The contract support costs were excluded because, based on the OBRA conference agreement, the OCFO classified these costs as "generic activities" that benefit licensees generally. Thus, NRC recovered these costs through the Part 171 annual fees.

In response to the condition reported in the prior year, the Office of the Inspector General (OIG) performed an audit and issued report (Report No. OIG/99A-01). Subsequent to the issuance of the FY 1999 financial statement report (Report No. OIG/99A-12), the agency provided a report intended to address the issues identified in this observation. The report did not provide for a solution to be implemented during FY 2001. We do, however, understand that the agency is looking to the future implementation of cost accounting to assist them in fully addressing this condition. Planned actions to be taken by the agency have resolved this condition. Closure is dependent on subsequent audit follow-up.

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FEDERAL FINANCIAL MANAGEMENT IMPROVEMENT ACT

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 years' instances of noncompliance.

FFMIA - Current Year Comment

Accounting for Internal Use Software

Refer to the Report on Management's Assertion About the Effectiveness of Internal Control, Current Year Comment B - Accounting for Internal Use Software for a detailed discussion of the condition and recommendation. This condition is considered a material weakness and a Federal Financial Management Improvement Act substantial non-compliance.

FFMIA - Status of Prior Year Comments

A. Managerial Cost Accounting

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 and recommendation. This condition continues to be considered a material weakness and a Federal Financial Management Improvement Act substantial non-compliance.

B. 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 1999 and FY 2000, the issue identified with the core general ledger - Federal Financial System (FFS) - operated by Treasury's Financial Management Service (FMS) remained an unresolved condition and continues to be an FFMIA substantial non-compliance.

In the prior year, we reported that FMS announced that it would no longer support the FFS system used by the agency. Therefore, NRC is in the process of identifying an alternative provider of such services. We consider this condition resolved and closure depends on the agency migrating from FMS during FY 2002.

Consistency of Other Information

NRC's overview of program performance goals and results, and other supplemental financial and management information contain 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.

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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); Government Information Security Act (PL 106-398); and
- 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.

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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.

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January 16, 2002

CHIEF FINANCIAL OFFICERS' RESPONSE TO THE AUDITORS' REPORT

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, DC 20555-0001

January 11, 2002

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

FROM: Jesse L. Funches /RA/
Chief Financial Officer

SUBJECT: DRAFT AUDIT REPORT - AUDIT OF THE NUCLEAR REGULATORY COMMISSION'S FISCAL YEAR 2001 FINANCIAL STATEMENTS

I have reviewed the draft audit report of the Nuclear Regulatory Commission's FY 2001 Financial Statements, dated January 9, 2002. Our responses to the recommendations are as follows.

Recommendation 1

The Chief Financial Officer (CFO) should give greater priority to implementing a cost management system within the revised milestones. The preparation of routine, useful, and reliable cost accounting information for agency managers should become a higher priority. Cost accounting information should enhance the agency's ability to evaluate the cost of outputs.

Response

Agree. A high priority has been and will continue to be placed on implementing a cost management system within the revised milestones of the remediation plan, dated May 31, 2001. These milestones are linked to the implementation of the PeopleSoft payroll, time and labor, and human resources modules. The PeopleSoft modules were implemented on November 4, 2001. Some of the remediation plan milestones have been delayed due to the one month deferral of the implementation of the PeopleSoft modules beyond the time frame projected in May 2001 and by unforeseen increased efforts to resolve issues associated with the interfaces between the PeopleSoft modules and the cost accounting system. Cost management reports will be provided to offices for the first quarter of FY 2002 early in calendar year 2002.

Recommendation 2

The CFO should review the agency practices for transitioning to new software applications or routines, which have financial statement impact. Essential to the deployment of new applications is the adequacy of testing the process controls, developing the control activities necessary to ensure reasonable assurance in the process, monitoring the implementation of the application and development of managerial reports to assist the review and reconciliation of the data provided by the new process. Implementation of business practices of this nature could assist the OCFO with deployment of other applications in the future.

Response

Agree. The OCFO will review the practices for transitioning to new software applications or routines that have financial statement impact. On November 4, 2001, the agency implemented the PeopleSoft Human Resources Management System. This new system integrates human resources, payroll, and time and labor, and is a single-entry system for time, attendance and labor reporting. This new system is expected to correct all of the system weaknesses identified in the Payroll/Personnel System. The staff is currently extracting IT labor data from the new Time and Labor module so we can monitor IT labor reporting. The staff plans to issue first quarter labor data to IT project managers by the end of February 2002 for their review and certification. This completes all remediation actions required by the Federal Financial Management Improvement Act.

Recommendation 3

The Chief Financial Officer should instruct the General Accounting Branch of their inherent responsibility to evaluate amounts being recorded as liabilities and expenses. It is essential that the review process include an understanding of the source of the information and the underlying techniques used to develop amounts referred for inclusion in the agency's financial records. At a minimum, OCFO should require DCPM to provide documentation to justify valid expenses and liabilities.

Response

Agree. The General Accounting Branch will ensure that all expenses recorded for contracts in closeout are supported by adequate documentation and will work with DCPM to obtain the necessary documentation.

APPENDIX A

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, DC 20555-0001

December 17, 2001

MEMORANDUM TO: Chairman Meserve

FROM: Hubert T. Bell
Inspector General

SUBJECT: INSPECTOR GENERAL'S ASSESSMENT OF THE MOST SERIOUS MANAGEMENT CHALLENGES FACING NRC (OIG-02-A-06)

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 (IG) of each Federal agency summarize what he or she considers to be the most serious management and performance challenges facing his or her respective agency and assess the agency's progress in addressing those challenges. In accordance with the Reports Consolidation Act of 2000, I submit my annual statement assessing the most serious management challenges facing 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 IGs. 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.

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.

DISCUSSION

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

CHALLENGE 1

Protection of nuclear material and facilities used for civilian purposes.

NRC's primary mission is to ensure that public health and safety are protected in the many different peaceful uses of nuclear energy. In light of the attacks of September 11, 2001, the agency needs to (1) reassess whether new terrorist threats require a change to the physical security standard of nuclear material and facilities, and (2) maintain a rigorous approach in its reviews of physical security and safeguards programs at NRC-regulated nuclear facilities. At the same time, NRC's oversight should be conducted in a manner that ensures public safety and aligns with the agency's goal to reduce unnecessary regulatory burden.

NRC's security program contains many facets to protect against the design basis threat (DBT). The DBT defines the threat against which power plants and selected fuel cycle facilities must be capable of defending. NRC's DBT does not currently include an attack using an airplane. As a result, the agency is re-evaluating the threat assessment methods and approach used to define the DBT. NRC is also reviewing the measures needed to protect against this new manifestation of terrorism. Furthermore, the agency will continue its efforts to coordinate with law enforcement and intelligence agencies.

NRC's immediate response to the attacks of September 11, 2001, was to advise nuclear power plants and fuel facilities to go to the highest level of physical security. The agency also fully staffed its Incident Response Center around the clock. The Chairman further tasked the agency to conduct a comprehensive study on how the threat of terrorism affects NRC and those it regulates. In response, the agency has established a special task force and identified the group's role, responsibilities, and objectives.

Prior to the events of September 11, 2001, NRC already had a program, the Operational Safeguards Response Evaluation (OSRE), in place for assessing physical security at nuclear power plants. In July 2001, the agency also announced the start of a 1-year pilot of the Safeguards Performance Assessment (SPA) program, a process by which a power-reactor licensee tests the effectiveness of key elements of its physical security program. NRC announced that it would use the pilot program to determine if the SPA had merit as a possible replacement program for OSRE. In the meanwhile, the agency continues to run both programs.

While the agency has initiatives underway to ensure the protection of nuclear material and facilities, NRC must remain focused on public safety and, at the same time, not increase licensees' unnecessary regulatory burden.

CHALLENGE 2

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

NRC continues to make its regulatory framework more risk-informed so that areas of highest risk receive the greatest focus. Where appropriate, NRC is also making its regulatory framework more performance-based by (1) using measurable outcomes to monitor systems and licensee performance and (2) focusing on the results as the primary basis of regulatory decision-making. This approach allows licensees more flexibility in determining how to meet NRC's regulatory requirements. The overall goals of this shift are to enhance safety decision-making, improve efficiency, and reduce resources devoted to issues with low safety significance. To be successful, NRC's stakeholders (particularly staff members responsible for implementing this approach) must fully understand its dynamics and the agency's goals.

NRC has made progress over the past year to transition to a more risk-informed and performance-based framework. With regard to nuclear reactors, the Office of Nuclear Reactor Regulation (NRR) took steps to improve coordination of office risk-informed initiatives by identifying a specific NRR branch as the central focal point for coordinating risk-informed activities within NRR and creating a new management group to oversee risk-informed initiatives. Another multidisciplinary group assigned to help the transition independently monitored and evaluated the results of implementation of the agency's Reactor Oversight Program. Other ongoing reactor-related efforts include the (1) development of risk-based performance indicators to be considered for use in the plant assessment process and

(2) conversion to new technical specifications developed to promote more consistent interpretation and application of technical specification requirements.

NRC is also using a task group to support its efforts to apply risk-informed techniques and approaches to the materials and waste arena regulatory framework. The Office of Nuclear Material Safety and Safeguards (NMSS) Risk Task Group (RTG) is using case studies and applying screening criteria to identify regulatory applications appropriate for risk-informing. The RTG has held public meetings about this methodology, trained NMSS staff in application of risk analysis tools and techniques, and used risk information to modify the inspection program.

These efforts to risk-inform oversight of reactors, waste, and materials indicate that NRC is attempting to take a coordinated approach to further the transition. However, as the Chairman noted in a recent speech at the Nuclear Safety Research Conference, this transition is proving to be a slow and challenging process.

CHALLENGE 3

Identification, acquisition, implementation, and protection of information resources.

Federal agencies' attention to and investment in 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. And, without proper protection, NRC's information resources could be compromised by a malicious cyber-attack.

NRC relies on a variety of information systems and networks to help carry out its responsibilities and support its business functions. The Agencywide Documents Access and Management System (ADAMS) - NRC's electronic information system for maintaining the agency's unclassified official program and administrative records in a centralized electronic document repository - is a system that continues to pose problems for NRC, both internally and externally. The agency is implementing an action plan to address these problems and received an assessment of ADAMS from an independent contractor. NRC also continues to work through issues with its Standard Financial and Integrated Resource Enterprise (STARFIRE) system - its proposed single, authoritative source of financial and resource information. STARFIRE was to consist of 10 modules and be operational by October 1999. However, that plan did not come to fruition, and the STARFIRE system implementation was downsized to include only those modules having the most immediate impact on the agency. As of

November 4, 2001, the human resources, payroll, and time and labor modules were implemented as the agency's system of record. The agency's goal is to make the remaining modules the subject of a future project action.

NRC's information security program is composed of a comprehensive set of policies and procedures. However, the agency did not have a process to consistently implement its program and recently received a grade "F" in computer security from a congressional score card. Based on findings and recommendations from OIG's evaluation based on the Government Information Security Reform Act, NRC developed and issued a Corrective Action Plan to address these issues.

While the agency has made some strides in the information resources area, the need for close management attention, integrated decision-making processes, and more diligent planning still exists.

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 perfor-

mance 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 has taken steps to strengthen controls over financial management processes during the past year. Actions planned or taken include measures to improve control and accountability of

NRC property, clarify agency procedures for awards made under General Services Administration Federal Supply Schedule contracts, and ensure consistency in the development and implementation of the annual license fee process. The agency also modified its primary information technology and related operations support vehicle, the Comprehensive Information Systems Support Consolidation (CISSCO) program. CISSCO II allows NRC more purchase options and is expected to facilitate tighter control over the billing process.

NRC is still working to implement a cost accounting process as required by Federal accounting standards. Full implementation is expected in 2002. During the first quarter of fiscal year (FY) 2002, NRC implemented STARFIRE's human resources, payroll, and time and labor modules. However, NRC has yet to achieve its vision for a fully integrated, agencywide financial management system. During FY 2001, NRC reduced the number of material weaknesses identified in the FY 1999 financial statement audit. During FY 20001, the agency also closed out four of nine reportable conditions and it expects to close out another reportable condition this year. Further, NRC received an unqualified opinion on its financial statements for the seventh consecutive year during FY 2000. While progress has been made to tighten controls over financial management processes, further improvements are needed.

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, 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 is implementing initiatives to improve the quality, clarity, and credibility of its communications with all stakeholders. The agency's initiatives include the development of

(1) communication plans to involve stakeholders early in regulatory activities, (2) a redesigned website to provide a richer variety of information, and (3) formal training courses to provide NRC staff with the necessary skills.

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 (which focus on subjects most likely to have a direct impact on the public) invite the public to observe the business portion of the meeting. After that is concluded, NRC staff members are available to answer the public's questions. Category 2 and category 3 meetings allow for a higher level of public participation.

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 an 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.

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 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 various actions to improve its internal communication over the past year and included plans for addressing this challenge in its performance plan for FY 2002. Actions taken or initiated over the past year include the (1) realignment of the Chief Information Officer to report to the EDO; (2) use of the electronic "EDO Updates," a new type of communication between the Executive Director for Operations (EDO) and the entire staff; and (3) updating of various management directives and production of other guidance to provide clearer direction to NRC staff. In May, the Senior Executive Service Candidate Development Program (SES CDP) class of 2001 produced a plan to improve internal communication, and in August the EDO sent a memo to office directors and regional administrators referencing the SES CDP report and establishing his expectations for making internal communication a priority. These efforts represent steps in a positive direction, and we will watch with interest the effect that these measures have on NRC's internal communication.

CHALLENGE 7

Integration of regulatory processes in a changing external environment.

NRC continues to be in a period of transition in several dimensions. As recently as a few years ago, the agency expected that a number of nuclear power plants would enter into early decommissioning. That has now changed and NRC expects most plants to apply for 20-year renewals to their operating licenses. The agency also continues to face deregulation of the electric power industry and is dealing with a significant consolidation of nuclear plant owners/operators.

The response to changes in the nuclear industry can have a significant impact on the safety of a plant and present challenges to the regulator. NRC is also dealing with the evolution of its nuclear material program.

NRC's external environment continues to evolve. For example, in a speech, the Chairman stated that the agency's license renewal program is proceeding aggressively, with three applications granted, seven plants under active review, and almost half the plants in the U.S. having indicated that they intend to pursue renewal. NRC is also proceeding with "pre-application" reviews of new reactor designs in anticipation of formal applications. To further prepare for new reactors and emerging issues, the agency established several multi-disciplinary groups to coordinate NRC activities. The Office of Nuclear Regulatory Research is also coordinating, with other program offices, to develop a research plan that identifies major areas for research and development to support advanced reactor licensing efforts.

While NRC has the authority to regulate the use of certain nuclear material, States are allowed to regulate the use of such radioactive material by entering into an agreement with the agency. The States that enter into this agreement with NRC are known as Agreement States. As the number of Agreement States continues to rise, NRC is now directly regulating a decreasing number of licensed users. As a result, these remaining NRC material licensees are bearing the burden of increasing fees to support agency efforts. In an effort to examine the impact, the agency formed a working group that developed and evaluated a range of possible options for a national program to better define State and Federal roles.

To meet the intent of the Government Performance and Results Act, NRC put in place a planning, budgeting, and performance management (PBPM) process. PBPM is the agency's disciplined, integrated planning framework. Currently, NRC's major program offices are using the process and the agency is making improvements for the use of PBPM in its service-oriented offices. An agency goal is to ensure that employees understand their roles and responsibilities under the PBPM process. Also, NRC's plan is to update and review its listing of external factors influencing agency activities.

As the agency continues to face a changing external environment, it must ensure that NRC's processes are well planned, budgeted, and integrated throughout the agency. Furthermore, agency managers need to be kept fully aware of what each organizational component is doing in an effort to reduce regulatory burden without compromising the public's health and safety.

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. Although the agency's expertise appears sufficient today, factors such as the aging workforce and a shortfall in nuclear engineering graduates suggest that NRC's future expertise and technical capability will likely decline without appropriate attention and action. 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. NRC needs to integrate its approach to human capital management into budgetary and strategic planning processes to ensure the agency's ability to function over the long run.

NRC has made a concerted effort to respond to this challenge over the past year. In response to the Chairman's request for a plan to assess and maintain the agency's scientific, engineering, and technical core competencies, staff developed and are working through an action plan for maintaining core competence by comparing the skills it has against the skills it will need and developing strategies to address those gaps. The agency has strengthened its recruitment program, offered its second recent SES CDP, developed and submitted an agencywide budget request for human capital initiatives, expanded the student intern program, and received permission from the Office of Personnel Management to waive the dual compensation reduction to hire Federal retirees in certain situations.

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 of attention they have received over the past year.

CONCLUSION

While I identified eight distinctive management challenges, the challenges are also interdependent. NRC can align itself to enhance its efforts to meet its public health and safety mission by continuing the important activities it has underway to address these most serious management challenges.

cc: Commissioner Dicus

Commissioner Diaz

Commissioner McGaffigan

Commissioner Merrifield

Management's Actions To Address Major Challenges

Protection of Nuclear Material and Facilities Used for Civilian Purposes

In a memorandum dated December 17, 2001, the 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 hour per day operation of the Emergency Operations Center. The agency also initiated a thorough review of our safeguards and physical security programs.

The NRC will undertake a review of the strategic plan to determine if our goals, strategies, and measures adequately address the actions necessary as a result of the terrorist attacks of September 11, 2001.

Actions and milestones to meet this challenge are currently being developed and will be included in the FY 2004 Budget Estimates and Performance Plan.

Development and Implementation of an Appropriate Risk-informed and Performance-based Regulatory Oversight Approach

Nuclear Reactors Safety Arena

In FY 2001, the NRC reactor safety arena met this challenge by implementing an important transition to an improved Reactor Oversight Process (ROP). The improved processes included developing and implementing a risk-informed inspection program to provide increased focus on aspects of plant performance which had the greatest impact on safe plant operation. It also uses licensee-reported performance indicator information to improve the program's objectivity, and to make it more understandable and predictable. We will continue to improve this program and build on its successful transition.

In addition, a recent NRC study (SECY-01-0133 of July 23, 2001) provided staff recommendations to the Commission for using risk analysis as a basis to revising nuclear reactor regulations (Section 10 CFR 50.46). These recommendations were based upon a feasibility study conducted by the NRC staff. The paper is publically available. Moreover, the Commission is making significant progress towards developing a risk-informed rule on the special treatment requirements for systems, structures, and components of reactor facilities. A significant exemption was granted to the South Texas Plant in FY 2001 on special treatment requirements. A risk-informed amendment to 10 CFR 50.44, pertaining to hydrogen monitoring , is well underway, and exemptions from the current rule have been granted to several licensee.

Nuclear Materials Safety Arena

In FY 2001, significant progress was made towards identifying 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 studies were used to evaluate the feasibility and usefulness of developing safety goals specific to nuclear material and waste regulation. In conducting these activities, an enhanced participatory process was used that included six public stakeholder workshops. Also during FY 2001, NRC developed and began to offer general risk assessment and communication training to management and staff, as well as risk training focused on specific technical regulatory areas.

A revision to 10 CFR Part 70 became effective on October 18, 2000. This revision increased the use of risk information for fuel cycle facilities. During FY 2001, the NRC worked with stakeholders to substantially complete development of the Standard Review Plan to implement the new requirements.

The NRC also completed the medical pilot inspection program in FY 2001.

During FY 2001, stakeholders were engaged in two public meetings held at NRC headquarters in Rockville, MD, and four public meetings held in the vicinity of six fuel cycle facilities to discuss changes proposed for fuel cycle oversight.

Nuclear Waste Safety Arena

In August 2001, NRC issued an internal version of the Integrated Issue Resolution Status Report (IRSR). In fiscal year 2002, NRC plans to incorporate additional information from six issue resolution meetings conducted in the latter half of fiscal year 2001, as well as reference final 10 CFR 63 and the Yucca Mountain Review Plan in the Integrated IRSR. NRC plans to publish the Integrated IRSR around the middle of fiscal year 2002.

NRC is conducting a Probabilistic Risk Assessment for Dry Cask Storage.

The draft report on screening analysis is scheduled for June 2002 with final report scheduled for April 2003.

In FY 2001, significant progress was made towards identifying 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 studies were used to evaluate the feasibility and usefulness of developing safety goals specific to nuclear material and waste regulation. In conducting these activities, an enhanced participatory process was used that included six public stakeholder workshops. Also during FY 2001, NRC developed and began to offer general risk assessment and communication training to management and staff, as well as risk training focused on specific technical regulatory areas.

Clear and Balanced Communication With External Stakeholders

Nuclear Reactors Safety Arena

The NRC had extensive interaction with licensees, the public, and other stakeholders as it developed the revised Reactor Oversight Program. Feedback and comments from external stakeholders were solicited through a series of monthly public meetings with industry, a public workshop which focused on the lessons learned, and issuance of a Federal Register notice for public comment. Finally, an Initial Implementation Evaluation Panel (IIEP) was established by the Agency in accordance with the Federal Advisory Committees Act (FACA) to serve

as an advisory committee to the Agency on the efficacy of the ROP. The panel included senior representatives, licensees, and public interest groups.

Nuclear Materials Safety Arena

During FY 2001, the materials arena developed and issued an array of integrated plans governing communications regarding: Event Response and Assessment, MOX Facilities, Materials Inspections, Medical Uses, Decommissioning, Enrichment Technology, and Uranium Recovery.

The Fuel Facilities Licensing and Inspection program conducted approximately 25 public meetings on significant regulatory issues. These meetings afforded NRC the opportunity to solicit stakeholder viewpoints and provided stakeholders the opportunity to exchange information on a variety of issues including the MOX licensing initiative, the fuel cycle oversight process, and the integrated safety analysis required by the revised Part 78. More than half of these meetings were held in the vicinity of those affected.

The NRC invited Agreement States to the Sealed Source and Device Seminar held in April 2001, and participated with the States on numerous work and management teams to arrive at collegial solutions to issues of common concern.

NRC conducted Working Group meetings on 10 CFR Part 40 (Licensing of Source Material) jurisdictional issues with stakeholders' participation.

Nuclear Waste Safety Arena

In FY 2001, NRC staff met with representatives of Native American tribes potentially impacted by the possible siting of a High Level Waste (HLW) geological repository at Yucca Mountain, Nevada to facilitate communication with Native American tribal governments and entities on health and safety issues associated with a possible licensing decision on a HLW repository.

NRC held public workshops for a proposed rulemaking on Part 71 (Packaging and Transportation of Radioactive Materials).

NRC hosted a workshop for industry and other interested stakeholders on ways to improve the decommissioning of nuclear facilities, and NRC staff participated in several meetings with interested stakeholders to discuss the decommissioning of nuclear facilities.

NRC also actively solicited comments from industry and the public for incorporation into the final guidance to be developed for site-specific 10 CFR Part 72 license renewals. The draft guidance was sent to Virginia Power in March 2001 since Virginia Power intends to submit a renewal application for the Surry independent spent fuel storage installation in Spring 2002.

NRC staff held four public meetings to gather comments prior to the initiation of environmental impact statements for the Sequoyah Fuels site decommissioning and the application to construct and operate a mixed-oxide fuel fabrication facility. Staff also prepared and released for interim use and public comment draft guidance for environmental reviews for licensing actions associated with the NRC's Office of Nuclear Materials Safety and Safeguards' programs.

Intra-agency Communication

Nuclear Reactors Safety Arena: The offices involved in the nuclear reactor arena have initiated periodic meetings with intra-agency stakeholders to enhance their communications and support functions. Offices in the arena have also developed and implemented a set of communications plans. The Office of Nuclear Reactor Regulation has developed and improved the prioritization of its user needs. The interface between the Office of Nuclear Regulatory

Research and the Office of Nuclear Reactor Regulation has been improved through monthly meetings to enhance integration and cooperation throughout both offices.

Communications between headquarters offices and regional offices have improved with the establishment of constructive relationships with key regional stakeholders and periodic conference (video) calls and trips.

Nuclear Materials Safety Arena

The arena has expanded the use of Division Director Headquarters/Regional Counterpart Meetings to improve communication and reach agreement on solutions to policy and technical issues.

The Office of Nuclear Materials Safety and Safeguards increased focus on regularly scheduled and effective staff meetings at all levels throughout the organization to ensure open lines of communications. The Office also encouraged and supported staff rotational assignments throughout the organization, and team work group assignments, in order to share insights across arenas, and to increase team-building and arena-based solutions to issues.

Periodic counterpart meetings are conducted by managers of the Office of Nuclear Material Safety and Safeguards, the Office of State and Tribal Programs, and the Office of Incident Response Operations to ensure communication on items of mutual interest.

Nuclear Waste Safety Arena

The Office of Nuclear Material Safety and Safeguards increased focus on regularly scheduled and effective staff meetings at all levels throughout the organization to ensure open lines of communication. The Office also encouraged and supported staff rotational assignments throughout the organization, and team work group assignments, in order to share insights across arenas, and to increase team-building and arena-based solutions to issues.

Inter-office communication on important issues such as the high-level waste management and decommissioning areas is made more effective through the use of Management Boards which meet bi-weekly to discuss status reports regarding action items and to provide additional direction to these programs, particularly in the area of policy issues.

Regulatory Processes That Are Integrated and Continue to Meet NRC's Safety Mission in a Changing Environment

Nuclear Reactors Safety Arena

One of the most important changes to the environment faced by the nuclear reactor arena is consolidation and restructuring of nuclear power assets. The NRC conducted a study to assess the implications for safety from consolidation within the industry. The study was published in the Federal Register on June 27, 2001 to allow the public an opportunity for comment on its findings. A public workshop was held to address comments on the paper on November 1, 2001. A final paper will be presented 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.

The NRC's Response to Terrorist Attacks Task Force, formed after the September 11, 2001 terrorist attack, and the Safeguards Steering Committee will facilitate an integrated agency response to the terrorist events of September 11.

Nuclear Waste Safety Arena

In FY 2001, an integrated effort was conducted on the issue of the unaccounted

Millstone rods to determine the health and safety impacts of their potential loss, what corrective and mitigative actions were needed, and whether any regulatory changes might be needed.

Identification, Acquisition, Implementation, and Protection of Information Resources

Information Security

GAO and OMB have identified information system security as a critical government management challenge. Enhanced information security is a requirement of PDD-63, PDD-67, and GISRA. On September 10, 2001, the NRC provided to OMB its response to the OMB memorandum of June 22, 2001 entitled, "Reporting Instructions for the Government Information Security Act (GISRA)." The response consisted of two separate components, one prepared by NRC's Inspector General (IG) characterizing the results of an independent IT security evaluation and the other prepared by the NRC Chief Information Officer (OCIO), based on the results of its annual IT security program review. These summaries were the primary input for OMB's summary report to Congress on the state of the federal government's compliance with GISRA. While the results of the program review found that NRC's information security program comprises a comprehensive set of policies and procedures, it also concluded that more oversight and measurement of NRC's computer security program is necessary in order to ensure that proper security practices are being followed.

In recognition of the importance of protection of critical agency information resources and systems, NRC is undertaking the development of a centralized information security oversight and performance measurement process.

This process will be based on the Federal IT Security Assessment Framework developed by the National Institute of Standards (NIST) and the CIO Council.

During FY 2001, NRC strengthened its computer security defense program to monitor and protect against the continued threat of cyber attacks on agency systems. NRC network administrators monitored the local and wide-area network for attacks and probes. NRC updated its existing desktop anti-virus detection/protection tools and anti-virus checker at the NRC E-Mail and Internet, and provided periodic Network Virus Alerts. Also, the agency distributed anti-virus software for employees to use on their home computers to help limit the transmission of viruses in either direction. As a result, there were absolutely no interruptions to or loss of data from NRC's business applications due to computer viruses.

The NRC completed an independent review (penetration test) of NRC's cyber protection mechanisms. Network security controls and detection tools were tested and the report determined that NRC is adequately protected from outside attacks. Plans were developed to conduct the next test of this sort in FY 2002.

We have provided employees with new on-line training in computer security awareness. Plans are in place to upgrade this awareness course with new/improved material in FY 2002 which will continue to inform employees about how to recognize and deal with possible computer security problems.

Electronic Government (E-Gov)

The President has identified Electronic Government (E-Gov) as an Administration management priority. Consistent with this direction, NRC has undertaken a number of process improvements and initiatives with a view toward expanding productivity and

enhancing customer service. In an October 22, 2001 report to OMB, NRC outlined its E-Gov and Government Paperwork Elimination Act (GPEA) priorities, as follows:

- Complete implementation of GPEA (and extend with digital signature capability).
- Move to electronic document management (from creation to retirement).
- Move to a single, fully-integrated human resources information management system (and provide employee self-service facilities).
- Leverage the Web for external and internal communications.

E-Gov advances in FY 2001 included a focus on implementing the Government Paperwork Elimination Act (GPEA): In its report to OMB, NRC identified a total of 625 types of information transactions conducted with the public, and found that most transactions are already conducted via email and the web. Sixteen percent of transactions are already compliant with GPEA; 66 percent more are expected to be compliant by the October 2003 deadline; 17 percent are exempt due to external statutory or security requirements; and 1 percent are still under consideration.

In FY 2001, NRC launched the Electronic Information Exchange (EIE) production system. The EIE program is a key component of NRC's E-Gov activities. It provides for the transmission of digitally signed electronic documents to NRC over the Internet in a way that ensures the documents will have legal standing in any hearing. EIE also gives NRC the opportunity to realize internal processing efficiencies and allow licensees to leverage the Internet to reduce regulatory burden by eliminating the creation and handling of paper-based documents.

The NRC is developing an Electronic Licensing rule that will allow NRC licensees and others to electronically submit almost all documents and data via EIE as well as CD-Rom, E-mail, and fax. NRC plans to expand this capability to include adjudicatory processes in FY 2002.

Administration of All Aspects of Financial Management

NRC has an overarching corporate management strategy to employ innovative and sound business practices and a supporting strategy to strengthen our financial systems and processes to ensure that our financial assets are adequately protected consistent with risk and that our financial information is better integrated with decisionmaking. For example, we will continue to implement new and existing financial accounting standards to maintain an unqualified financial opinion and to improve the effectiveness of our internal controls. We will provide reliable, timely financial information to managers for use in decision-making. We will increase managers' accountability/responsibility for their decisions by placing more agency funds under their controls. We will increase awareness of using financial information through training. We will use information technology to streamline our financial management processes.

NRC has a number of significant achievements in FY 2001. The Chief Financial Officer (CFO) and the Executive Director of Operation (EDO) staff participated in agency wide interdisciplinary group to develop a statement of work (SOW) for the new CISSCO II program that addresses the financial management weaknesses of the original CISSCO I program that ends in August 2001. The CFO and EDO staff participated in agency wide interdisciplinary group to select vendors for the new CISSCO

II program. The CFO evaluated the status of the implementation of new systems that support cost accounting and revised the cost accounting remediation plan for implementing new cost accounting system in January, 2002. The CFO reviewed the potential of creating more meaningful cost reports to better meet the needs of managers on an interim basis (prior to implementing new cost accounting system).

Maintenance of a Highly Competent Staff

Human capital management is one of the foremost management issues facing government agencies today. It is one of the five issues on the Presidents Management Agenda. The General Accounting Office (GAO) and the NRC's Inspector General (IG) have both identified human capital management as an important issue facing the NRC. The GAO report, "Major Management Challenges and Program Risks," highlighted the potential skill shortages NRC can expect in the future as a result of an increasing number of retirements and a decreasing number of university nuclear engineering and safety programs. The NRC's IG found that the NRC is making a concerted effort to strengthen its approach to workforce planning; however, it noted the lack of a comprehensive, agency wide workforce plan.

The NRC is taking a number of steps to respond to this challenge. First, our strategic workforce planning efforts are being integrated into the NRC Planning, Budgeting, and Performance Management (PBPM) process for the FY 2004 budget. Integrating human capital planning with strategic planning and budgeting efforts strengthens our efforts to meet our mission and business requirements effectively and efficiently and to achieve our goals. In addition, as noted above, performance goals and measures are being instituted in our FY 2003 budgeting and performance plan to measure our progress in meeting our goals for human capital management. By FY 2003, the agency will have human capital performance goals and measures in place that will measure the agency's progress in maintaining a highly competent staff with the skills and competencies needed to carry out the agency's mission and business requirements.

Secondly, we are aggressively using all available personnel flexabilities and tools, as well as seeking to add new measures, to provide needed flexibility to recruit and retain qualified staff. Recruitment and retention are being enhanced by approving selected waivers of dual compensation limitations under delegated authority from the Office of Personnel Management. We are also using retention allowances, as appropriate, for current employees, and increasing the number of recruitment bonuses offered to new applicants. To recruit highly-skilled entry-level professional employees necessary to build the workforce for the future, we are instituting a student loan repayment program to offset college loan indebtedness and creating a new undergraduate fellowship program to help pay the expenses of promising college seniors.

Third, we are building a capability to inventory current agency skills and competencies and forecast future skills and competency needs. We completed a pilot effort to identify the highly specialized skills and competencies currently available in the agency, the skills and competencies needed over the next five years, and the gap closure strategies necessary for acquiring and maintaining the needed skills and competencies. The results of this pilot and its associated process are being reviewed to develop and to implement an agency wide skills assessment and needs forecasting process beginning in FY 2002. By FY 2004, the agency plans to have a fully integrated process and an

automated skills database to support human capital management. The process as well as the data and information available from the database will provide the tools for the agency and its managers to assess effectively the highly specialized skills and competencies available in the agency, the current and future skills and competencies needed, and the basis to develop strategies to address those needs that will result in more effective management and utilization of the agency's human capital resources.

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 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. 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, 2001, there were no outstanding audits recommending that funds be put to better use.

Management Report on Office of the Inspector General Audits with Disallowed Costs For the Period October 1, 2000-September 30, 2001

Category	Number of Audit Reports	Questioned Costs	Unsupported Costs
A. Audit reports with management decisions on which final action had not been taken at the beginning of this reporting period.	0	$0	$0
B. Audit reports on which management decisions were made during this period.	1	$2,422	$0
C. Audit reports on which final action was taken during this report period.	1	$2,422	$0
(i) Disallowed costs that were recovered by management through collection, offset, property in lieu of cash, or otherwise.	1	$2,422	$0
(ii) Disallowed costs that were written off by management.	0	$0	$0
D. Reports for which no final action had been taken by the end of the reporting period.	0	$0	$0

Management Decisions not Implemented within One Year

Management decisions were made before September 2000 for the OIG audit reports discussed in the following paragraphs. As of September 30, 2001, the NRC did not take final action on some issues. However, the OIG did not recommend that funds be otherwise allocated.

Independent Auditors' Report and Principal Statements for the Year Ended September 30, 1998

The OIG determined that the agency's implementation of managerial cost accounting was insufficient to comply with SFFAS 4, which requires Federal agencies to accumulate and report costs of activities on a regular basis for management information purposes. In addition, interim cost management information should be provided to agency managers to support outcomes and outputs realized by the agency.

A cost accounting software package has been installed and is being configured to reflect how the agency initially plans to report costs, including the allocation of indirect costs. During FY 2001, the cost accounting module was used to provide agency managers with interim cost reports at the strategic arena level for labor costs and planned accomplishment level for non-labor costs. In November 2001, the agency implemented the PeopleSoft Human Resources Management System (HRMS), which is an integral component for implementing managerial cost accounting. The HRMS will enable the agency to report labor costs by planned accomplishment. During the first quarter of 2002, the agency expects to issue the first set of cost reports utilizing HRMS data. This will complete the corrective actions to resolve the auditor's material internal control weakness in this area.

Independent Auditors' Report and Principal Statements for the Year Ended September 30, 1999

The OIG recommended that the agency improve management controls over small entity self-certification in order to adequately determine the eligibility of small entity applicants. During FY 2001, the NRC developed a strategy, to be implemented during FY 2002, that includes a 100 percent review of small entity self-certifications. The policy issued December 2001 identifies new sources of information to validate or contradict a claim for small entity status. This will complete the planned corrective actions to resolve this condition.

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 the full-cost concept as embodied in OMB Circular No. A-25, User Fees, and SSFAS 4, Managerial Cost Accounting Concepts and Standards for the Federal Government, and that actual billing and cost data be used to refine future rate calculations.

The agency is in the process of implementing a cost accounting system. When cost accounting is implemented, the Office of the Chief Financial Officer will use the cost data as input to review and refine, as appropriate, the existing full cost rate, including identification and assignment of direct and allocated indirect costs. The agency expects to complete corrective action during the third quarter of FY 2002.

Review of NRC's Decommissioning Fund Program February 1, 2000

The OIG recommended: (1) that reviews of decommissioning funds be implemented consistent with the Standard Review Plan on Power Reactor Licensee Financial Qualifications and Decommissioning Funding Assurance to ensure that all reporting requirements are met and that reported data is consistent, and (2) that a lessons learned be conducted to strengthen and enhance the review process.

The agency issued to the power reactor licensees Regulatory Issue Summary 2001-07 entitled "10 CFR 50.75(f)(1) Reports on the Status of Decommissioning Funds (Due March 31, 2001)" on February 23, 2001. The improved quality control process was used during the NRC's review of the biennial trust fund reports which were due March 31, 2001. When reviewing the licensees' reports, the primary reviewers verified that all of the reports met all reporting requirements, clearly identified radiological costs, and did not include non-radiological costs in the licensees' certification amounts. When deficiencies or ambiguities in the licensees' reports were identified, additional information was obtained from the licensees.

Based on the findings of the OIG audit and experience gained from the first biennial review in 1999, the staff completed an evaluation of the lessons learned on December 16, 1999. As part of the March 2001 biennial reviews, another lessons learned study was conducted. As a result, the enhanced quality control measures have been integrated into the review process for evaluating these decommissioning trust fund reports. The agency considers corrective actions for this audit complete.

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 information technology (IT) projects be clarified so that senior agency managers can make informed decisions whether or not to continue, modify, or terminate major IT projects.

As part of the capital planning and investment control (CPIC) process, a lessons learned review is currently underway to determine if "significant variation" of cost, schedule, and performance goals are being further clarified, and alternative approaches for monitoring progress are being considered. The results will be incorporated into Management Directive 2.2, Capital Planning and Investment Control. The agency expects to complete correction action during the third quarter of FY 2002.

Review of Audit Follow Up System ***August 14, 2000***

The OIG recommended that the Management Directive 6.1 Handbook, Resolution and Follow Up of Audit Recommendations, be revised to reflect the periodic scheduling standards for conducting analyses of audit recommendations to determine possible trends and system-wide problems and for conducting audit follow-up reviews. Trend analyses will be conducted annually and audit follow-up reviews will be conducted biannually. The agency expects to complete revisions to the Management Directive 6.1 Handbook during the third quarter of FY 2002.

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, the Chief Financial Officer, and the Chief Information Officer 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. The Executive Director for Operations, the Chief Financial Officer, and the Chief Information Officer continued to meet periodically. The agency is currently determining which management directives require revisions. The agency expects to complete corrective action during the second quarter of FY 2002.

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 benefitting the agency that resulted from DPV/DPOs, and that a special review group be convened every 3 years to assess the DPV/DPO program operations.

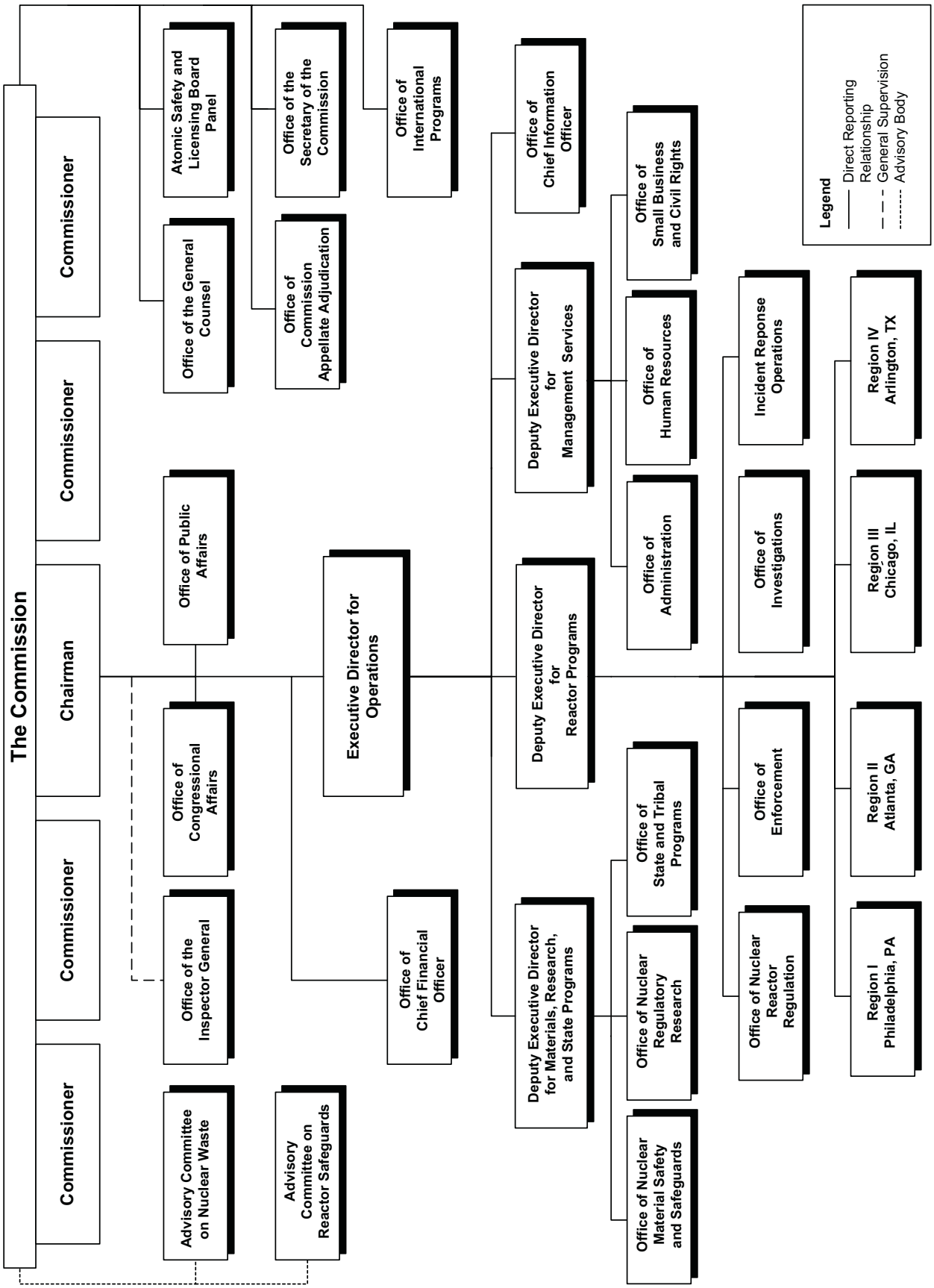
A Special Review Panel was convened in May 2001. The panel, which is still in session, has completed the initial review of all DPV/DPO cases filed since the last special panel met in 1994. Names of potential interviewees were proposed as a result of this effort. Interviews of all office directors and regional administrators, as well as DPV/DPO filers, ad hoc panel chairs, and panel members selected by the Special Review Panel, were completed in December 2001.

After all the data have been collected, analyzed, and evaluated, the panel will prepare a report recommending any necessary changes to or modifications of the DPV/DPO process. Another of the panel's tasks is to make recommendations regarding the recognition of filers whose contributions to the agency have not been adequately recognized. These recommendations will be made concurrent with the issuance of the report.

Revisions to Management Directive 10.159, Differing Professional Views or Opinions, will be made in accordance with the recommendations found in the Special Review Panel's report, as well as other recommendations found in this OIG report. The new directive will include the requirement that a Special Review Panel convene 1 year from the date of its publication and every 3 years thereafter. The agency expects to complete corrective action during the fourth quarter of FY 2002.

Appendix C

NRC Organization Chart as of September 30, 2001



End Notes

1. "Nuclear reactor accidents" is defined in the NRC Severe Accident Policy Statement (50 Federal Register 32138, August 8, 1985) as those events which 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. Licensee compliance with notification regulations are periodically inspected by the NRC. In addition, NRC resident inspectors are aware of the events that occur at nuclear plants.

2. **Data sources and verification:** The NRC requires licensees to report radiation exposures to the NRC. Licensee compliance with the reporting criteria and radiological release criteria is periodically inspected by the NRC. A resident inspector monitors the facility and would be aware of deaths resulting from acute radiation exposures.

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 in accordance with Abnormal Occurrence Criterion I.A.3. **Data sources and verification:** The NRC requires licensees to report radiation exposures to the NRC. Licensee compliance with the reporting criteria and radiological release criteria is periodically inspected by the NRC. A resident inspector monitors the facility and would be aware of significant radiation exposures.

4. **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 its occurrence. Information assessment teams would follow-up any significant events. A written report would also be filed by the licensee within thirty days of its occurrence. The investigation would verify the accuracy of the information.

5. 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 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. Licensee compliance with the reporting criteria and radiological release criteria is periodically inspected by the NRC. 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.

6. **Data sources and verification:** The NRC monitors industry safety performance through its reactor oversight process. Licensees are required to file reports which contain operational and event information. NRC Inspections confirm that these reports are complete and reliable.

7. 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 which have the potential to cause core damage. These events are identified by first computer-screening of licensee event reports or other events designated by the NRC staff. Selected events undergo an engineering evaluation to identify, analyze, and document precursor events. Preliminary analysis of potential precursor events are 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.

8. Over exposures are those that exceed limits as provided by 10 CFR 20.2203(a)(2), excluding instances of over exposures 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 radiation contamination have monitors that record radiation levels. Any occurrences of radiation levels exceeding regulatory limits would be identified.

9. These are releases for which a 30-day reporting requirement under 10 CFR 20.2203(a)(3) is required. **Data sources and verification:** Licensees are required to file reports that contain information on events of excess levels of 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 instances in which radiation had been released to the environment would be recorded on monitors and a follow-up investigation would be conducted.

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

11. Weight percentage - (i.e. percent of uranium 235 atoms out of the total number of uranium atoms).

12. **Data source and verification:** Events resulting in deaths could be reported to the NRC and/or Agreement States through a number of sources, but primarily through required licensee notifications. These events are summarized in Event Notifications and Preliminary Notifications which are used to widely disseminate the information to the appropriate managers and staff. For events of this magnitude, media reports would likely provide another source of reporting, which would lead NRC to verify and validate the information through other sources. For Nuclear Materials Safety arena activities, the 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.

13. 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 events of this magnitude, media reports would likely provide another source of reporting, which would lead us to verify and validate the information through other sources. 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.

14. 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 Report to Congress, NUREG-0090, which can be located at
    http://www.nrc.gov/NRC/NUREGS/SR0090/V22/sr0090V22.pdf
    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 events of this magnitude, media reports would likely provide another source of reporting, which would lead us to verify and validate the information through other sources. 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.

15. 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.

16. In accordance with the requirements of 10 CFR 95.75.
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.

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

18. Reportable events of material entering the public domain in an uncontrolled manner as reported under 10 CFR 20.2201(a). The Nuclear Materials Events Database (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.

19. **Data sources and verification:** Criticality events are reported by the licensee immediately to the NRC Operations Center by telephone. Licensees' follow 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.

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

21. Over exposures 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.

22. 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.

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

24. Releases for which a 30-day reporting requirement under 10 CFR 20.2203(a)(3) is required. 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.

25. 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.

26. 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.

27. 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 judgement 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.

28. **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 which 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. For events of this magnitude, media reports may also provide another source of reporting which would lead NRC to verify and validate the information through other sources. The decision on whether or not 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 or not 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.

29. 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. For events of this magnitude, media reports may also provide another source of reporting, which would lead us to verify and validate the information through other sources. 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.

30. 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. For events of this magnitude, media reports may also provide another source of reporting, which would lead us to verify and validate the information through other sources. 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.

31. In accordance with Appendix G to 10 CFR Part 73 and 10 CFR 74.11(a).
Data source and verification: Licensees report events which entail losses, thefts, diversions, or radiological sabotages of special nuclear material or radioactive waste within one hour of their occurrence to the NRC Headquarters Operations Center. A followup written report is required to 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 followup, and is tracked in the Safeguards Summary Event List Database. Any lack of appropriate licensee reporting would be discovered through the routine inspection program. The NRC holds periodic meetings where staff and management will validate previously screened events.

    This measure only applies to actual losses, thefts, diversions, or actual 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.

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

33. **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.

34. NRC recognizes that no explicit reporting requirements exist for substantiated breakdown determination. The NRC relies on its safeguards inspection findings and licensee notifications.

35. **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.

36. Releases for which a 30 day reporting requirement under 10 CFR 20.2203(a)(3) is required.

37. **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.

38. Measuring the protection of future generations over the planning period of the next five years is a unique challenge which the Commission is continuing to evaluate.

39. **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, NRC completed a review of formerly terminated licensed sites with potential contamination that could require cleanup and disposal. NRC identifies a responsible party that will need to clean up such sites and works with the party to facilitate cleanup.

40. All of the scheduled public outreach meetings were held as scheduled consisting of meetings in Pahrump, NV on 5/22/2001, Las Vegas, NV on 5/23/2001, Mesquite, NV on 5/24/2001, and Tribal Interaction at Las Vegas, NV on 9/26-27/2001.

41. 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.

42. 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.

43. Prelicensing activities such as this constitute informal conferences between a prospective applicant and the staff and are not part of a potential licensing proceeding.

44. Domestic safeguards are those nuclear material control and accounting measures and physical protection measures implemented by and within any country, including the U. S. , 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.

45. Significant incidents are incidents which would include a loss by theft or diversion of one 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 safeguards commitments by a non-nuclear weapon state.

46. Agreements for Cooperation in the Civil/Peaceful Use of Nuclear Energy are required under section 123 of the Atomic Energy Act of 1954, as amended, 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 an NRC export license can be issued.

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