NUREG-1100
VOLUME-19

BUDGET ESTIMATES AND PERFORMANCE PLAN FISCAL YEAR 2004

February 2003

U.S. Nuclear Regulatory Commission

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NUREG-1100
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BUDGET ESTIMATES AND PERFORMANCE PLAN

FISCAL YEAR 2004

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U.S. Nuclear Regulatory Commission

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EXECUTIVE SUMMARY

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EXECUTIVE SUMMARY

The Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974, as amended, establish the fundamental regulatory mission of the U.S. Nuclear Regulatory Commission (NRC). 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.

Overview of the NRC Budget and Performance Plan

The fiscal year (FY) 2004 budget and performance plan submitted by the U.S. Nuclear Regulatory Commission's supports the implementation of the agency's Strategic Plan goals and strategies for FY 2000–FY 2005 and addresses a number of new challenges, as well as an increased workload. The NRC's proposed FY 2004 budget totals $626.1 million, an increase of $41.1 million over the FY 2003 budget. This budget reflects $545.6 million from fees assessed to NRC licensees, resulting in a net usage of appropriated funds of $80.5 million. The following table details the NRC's budget authority by appropriation.

TOTAL NRC BUDGET AUTHORITY BY APPROPRIATION

NRC Appropriation	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Salaries and Expenses (S&E) ($K)				
Budget Authority	552,470	578,184	618,800	40,616
Offsetting Fees	473,107	492,545	538,844	46,299
Net Appropriated—S&E	79,363	85,639	79,956	-5,683
Office of the Inspector General (OIG) ($K)				
Budget Authority	6,180	6,800	7,300	500
Offsetting Fees	5,933	6,392	6,716	324
Net Appropriated—OIG	247	408	584	176
Total NRC ($K)				
Budget Authority	**558,650**	**584,984**	**626,100**	**41,116**
Offsetting Fees	479,040	498,937	545,560	46,623
Total Net Appropriated	79,610	86,047	80,540	-5,507

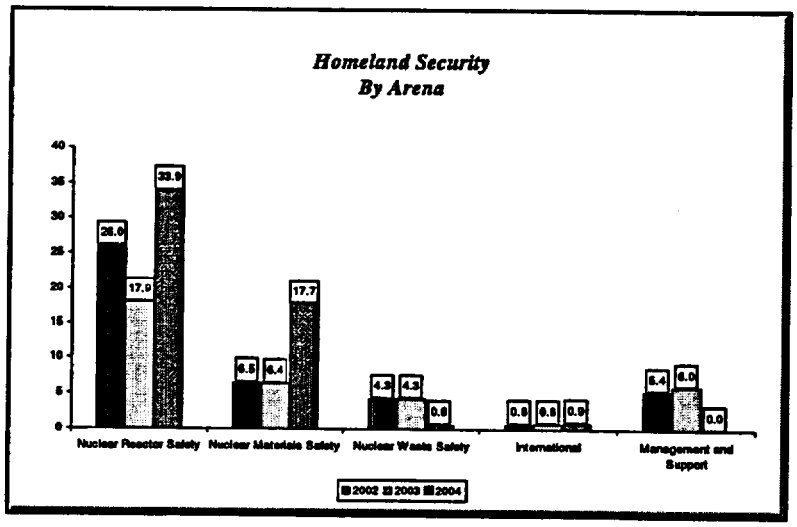
EXECUTIVE SUMMARY

The NRC faces significant challenges in addressing Homeland Security needs, licensing new reactor designs, reviewing applications for reactor license renewal, and preparing for a potential license application for a High-Level Waste (HLW) repository. First, the NRC's proposed FY 2004 budget supports the Administration's Homeland Security efforts to protect public safety and security. Toward that end, the NRC will conduct a comprehensive analysis of its safeguards and security programs for nuclear power reactors, other NRC-regulated facilities, and radioactive materials, and will implement strengthened measures where appropriate. Second, the proposed budget addresses the nuclear industry's interest in building new nuclear power plants by positioning the NRC to process new applications and conduct pre-application reviews of new reactor designs. Third, the NRC has renewed, for an additional 20 years, the operating licenses of 10 commercial nuclear reactors, and the proposed budget allows for licensees' intentions to submit many more applications for renewal. Finally, with Presidential and Congressional approval of the proposed Yucca Mountain, Nevada site for a HLW repository, the pace of the NRC's high-level waste program is increasing, and the proposed budget enables the NRC staff to continue its preparations for license application that the U.S. Department of Energy (DOE) plans to submit in December 2004.

Highlights

Homeland Security

The FY 2004 budget includes $53.1 million for Homeland Security activities. (Please note that the NRC was not included in the group of organizations consolidated into the new Department of Homeland Security.) As illustrated in the bar graph to the right, the proposed budget reflects the NRC's FY 2004 Homeland Security activities in the Nuclear Reactor Safety, Nuclear Materials Safety, Nuclear Waste Safety, and International Nuclear Safety Support arenas.



Since the terrorist attacks in September 2001, the Commission has been conducting a comprehensive review of its programs and the security of the nuclear facilities and activities that the agency regulates. As a result, we have made a number of significant changes to our

regulatory programs and have enhanced the already robust security of our sensitive facilities and activities. Among these advancements, we have established a new Office of Nuclear Security and Incident Response to focus and coordinate the agency's efforts and expertise in the security and emergency preparedness areas. We have also implemented a new homeland security threat advisory system based on guidance from the Department of Homeland Security and have included additional classes of licensees in that system. We are also studying the potential vulnerability of nuclear power plants, fuel cycle facilities, and nuclear fuel and materials storage and transportation containers to a variety of security threats, including deliberate aircraft crashes on power reactors. In addition, in November 2002, we completed a new round of tabletop exercises using expanded threat scenarios for power reactor facilities and selected fuel cycle facilities. We will incorporate the lessons learned from those exercises into an expanded force-on-force testing pilot program to be completed during 2003. In the course of these efforts, we have had the benefit of continuing interaction, consultation, and coordination with several Federal agencies and State governments.

During FY 2003, we expect to complete our review and revision of the design-basis threat that provides the foundation for the security programs of nuclear power plants and Category I fuel facility licensees, and then proceed to revise our safeguards and security requirements. We will complete the vulnerability assessment of power reactors and will continue to evaluate vulnerabilities of other facilities. We will then implement appropriate measures to reduce any significant weaknesses identified from vulnerability assessments to those facilities. In addition, we are working with DOE and the International Atomic Energy Agency to enhance the control of radioactive material to prevent its use in radiological dispersal devices, and we are significantly involved in a review of controls of radioactive sources with the same objectives.

The Homeland Security efforts planned for FY 2004 are as follows:

- Issue regulatory improvements to address any significant weaknesses identified during the vulnerability assessment of nuclear power reactor facilities and assess licensees' implementation of measures.

- Perform tests to generate data needed to validate analysis tools used to reduce the conservatism of the vulnerability studies.

- Complete the vulnerability assessments of facilities other than power reactors and take action to reduce the vulnerabilities. Assess licensees' implementation of the required measures.

- Conduct full security performance reviews, including force-on-force exercises, at each nuclear power plant on a 3-year cycle instead of the 8-year cycle that the agency used befpre September 11, 2001. These reviews will also include tabletop exercises that involve a wide array of Federal, State, and local law enforcement and emergency planning officials.

- Enhance control of radioactive materials to prevent their potential use in a radiological dispersal device. This effort will involve accountability of radioactive sources within the Nation's borders, as well as the import and export of sources.

- Assess the potential impact of cyberterrorism, and analyze the increased quantity of intelligence information.

- Enhance coordination and communication between Federal and State agencies, Tribal governments, and the NRC by determining communication needs and establishing communications protocols.

- Conduct technical reviews of the NRC's import/export licensing function and nonproliferation consultations.

- Complete rulemaking on access authorization and fitness-for-duty.

New Reactor Licensing

The NRC's proposed FY 2004 budget provides $33.5 million for new reactor licensing. This program is included in the Nuclear Reactor Safety arena. The NRC currently expects to begin reviewing 2 early site permit applications in FY 2003 and 1 in FY 2004. In addition to the technical review and inspection activities associated with early site permit applications, FY 2004 resources also support (1) pre-application reviews of 3 new designs, (2) design certification review of 1 new design, and (3) regulatory infrastructure improvements for the new reactor designs, including updating the NRC's regulations and guidance, analytical tools, and experimental data to support licensing decisions.

Reactor License Renewal

The proposed FY 2004 budget allows $20 million for the review and renewal of nuclear power reactor licenses beyond their original expiration date. This program is included in the Nuclear Reactor Safety arena. The NRC reviews license renewal applications to determine whether a reactor can continue to operate safely during the extended period of 20 years. The NRC expects to receive 6 new applications for renewal (for 12 reactors) in FY 2004, in addition to

the 12 applications (for 19 reactors) that are expected to already be under review. Program activities include reviewing the applications and supporting documentation from licensees, conducting independent evaluations of the safety and environmental issues associated with extended reactor operation, and conducting inspections to verify the licensees' activities to manage reactor aging and information in the application.

High-Level Waste Regulation

The NRC's proposed FY 2004 budget includes $33.1 million for high-level waste regulation. This program is included in the Nuclear Waste Safety arena. The budget reflects the repository license application that DOE plans to submit in December 2004, as well as the need to further assess the safety of spent nuclear fuel shipments to the potential repository.

During FY 2004, the NRC's preparations for a potential license application will include resolving key technical issues through prelicensing consultations with DOE, observing DOE's quality assurance audits, and communicating extensively with stakeholders. The NRC will also prepare for hearings on the potential license application. FY 2004 resources will also support the agency's need to obtain hearing space in Nevada and develop and implement information systems to make documents available to the public and parties to the hearing, as well as to provide support during hearings.

The NRC will also conduct a package performance study to assess the performance of spent nuclear fuel shipping containers during severe accidents. The study will include conducting crash and fire tests of full-scale rail and truck casks. Our budget anticipates that both DOE and the international community will also provide funding to participate in the testing.

FY 2004 Budget Changes

The NRC's proposed FY 2004 budget of $626.1 million represents a $41.1 million increase over the agency's budget for FY 2003. Specifically, the proposed budget identifies increases in the following areas:

- Approximately $9.7 million of the proposed increase is for non-programmatic changes, primarily for salaries and benefits due to the Federal pay raise and other increases in base pay and benefits.

- Approximately $16 million of the increase is needed for Homeland Security activities, including enhanced control of radioactive materials to prevent their potential use in radiological dispersal devices.

- Approximately $12 million of the increase is needed for new reactor licensing activities based on projected industry plans and schedules. Activities include technical reviews of early site permits, pre-application and design certification reviews, and a regulatory infrastructure update.

- Approximately $4.5 million of the increase is needed to address the new reactor license renewal applications that the agency expects to receive in FY 2004.

- Approximately $8.5 million of the increase is needed for activities associated with DOE's planned submittal of a license application for a HLW repository.

- Approximately $6 million of the increase is intended to accommodate anticipated increases in rent, information technology, and other infrastructure costs.

These increases are partially offset by $15.6 million in savings resulting primarily from conducting more effective and efficient programs.

FY 2004 Budget and Program Summary by Strategic Arena

SUMMARY OF BUDGET AUTHORITY AND STAFFING BY STRATEGIC ARENA				
			FY 2004 Estimate	
Summary	FY 2002 Enacted	FY 2003 Estimate	Request	Change from FY 2003
Budget Authority by Strategic Arena ($K)				
Nuclear Reactor Safety	259,274	273,677	305,816	32,139
Nuclear Materials Safety	58,825	60,264	71,234	10,970
Nuclear Waste Safety	68,307	73,203	70,117	-3,086
International Nuclear Safety Support	5,052	5,237	5,368	131
Management and Support	161,012	165,803	166,265	462
Subtotal (Salaries & Expenses)	**552,470**	**578,184**	**618,800**	**40,616**
Inspector General	6,180	6,800	7,300	500
Total NRC	**558,650**	**584,984**	**626,100**	**41,116**
Staffing (FTE) by Strategic Arena				
Nuclear Reactor Safety	1,496	1,566	1,624	58
Nuclear Materials Safety	387	384	384	0
Nuclear Waste Safety	285	273	253	-20
International Nuclear Safety Support	38	38	38	0
Management and Support	600	601	608	7
Subtotal Salaries & Expenses	**2,806**	**2,862**	**2,907**	**45**
Inspector General	44	44	47	3
Subtotal NRC	**2,850**	**2,906**	**2,954**	**48**
Reimbursable Business-Like FTE	15	15	16	1
Total NRC	**2,865**	**2,921**	**2,970**	**49**

Nuclear Reactor Safety

Within the Nuclear Reactor Safety arena, the proposed budget will support the following activities:

- Regulatory oversight of 104 reactors licensed to operate, as well as review of licensing actions including power uprates and license transfers
- New reactor licensing activities, including review of early site permit applications, pre-application reviews, and design certification reviews
- Review of 6 new reactor license renewal applications for 12 reactors, which the agency expects to receive in FY 2004, in addition to 12 applications (for 19 reactors) that the NRC expects to already be under review during FY 2004
- A reactor research program to ensure that licensees safely design, construct, and operate civilian nuclear reactor facilities
- Revisions to reactor regulations that reduce unnecessary burden while maintaining safety
- Planned Homeland Security activities, including addressing any weaknesses identified through ongoing vulnerability assessments; conducting security performance reviews, including force-on-force exercises, at each nuclear power plant on a 3-year cycle instead of the 8-year cycle that the agency used before September 11, 2001; conducting tabletop exercises that involve a wide array of Federal, State, and local law enforcement and emergency planning officials

Nuclear Materials Safety

Within the Nuclear Materials Safety arena, the proposed budget will support the following activities:

- Continued regulatory oversight and inspection of the licensed fuel cycle facilities, 17 nuclear fuel facilities, two gaseous diffusion enrichment facilities, and 15 uranium recovery facilities
- Reviews of new applications for 2 gas centrifuge facilities (1 lead cascade facility and 1 full-scale facility) and ongoing reviews of the application for a mixed-oxide fuel fabrication facility

- Licensing and inspection of approximately 4,900 nuclear materials licenses in FY 2004
- Ongoing efforts to risk-inform the regulatory framework for nuclear materials
- A nuclear materials research program focused on research to ensure that licensees safely design, construct, and operate non-reactor fuel cycle facilities and safely use non-reactor NRC regulated materials
- Planned Homeland Security activities, including improving the control of radioactive materials to prevent their potential use in radiological dispersal devices, developing tracking systems for nuclear materials transactions, and contingency planning for unconventional threats to national security

Nuclear Waste Safety

Within the Nuclear Waste Safety arena, the proposed budget will support the following activities:

- HLW activities associated with DOE's planned license application submittal in December 2004
- Nuclear waste safety research, including assessing how spent nuclear fuel shipping containers perform in severe rail and highway accidents, by full-scale testing of rail and truck casks
- Development, integration, and implementation of the Digital Data Management System in support of the hearing process for the potential HLW repository
- Regulatory oversight, including licensing and inspection of spent fuel storage and transportation and decommissioning facilities

International Nuclear Safety Support

Within the International Nuclear Safety Support arena, the proposed budget will support the following activities:

- Continued work with international organizations such as the International Atomic Energy Agency and the Nuclear Energy Agency
- Issuance of 90–130 import/export licenses per year

- Ongoing support for work sponsored by the Agency for International Development in the countries of the Former Soviet Union and Central and Eastern Europe

- Continued access to non-U.S. safety information through interactions with foreign entities (thereby leveraging NRC resources)

- Development and implementation of international regulatory standards, policies, and practices

Management and Support

The proposed budget will support the following Management and Support activities:

- Administrative and logistical support, including rent and facilities management, physical and personnel security, contracting, property management, and administrative services

- Recruitment, staffing, training, workforce effectiveness and utilization, training and development, and human capital management

- The NRC's information management and information technology infrastructure and services, including information security

- The NRC's accounting; finance; and Planning, Budgeting, and Performance Management processes

- Necessary policy support activities

Significant FY 2002 Accomplishments

Homeland Security Initiatives

During FY 2002, the NRC issued a series of safeguards and threat advisories to bring the major licensed facilities to the highest security level immediately following the terrorist attacks on September 11, 2001. These actions enhanced security across the nuclear industry, and many of the strengthened security measures are now requirements as a result of subsequently issued NRC orders. Specifically, those security enhancements include measures to provide additional protection against vehicle bombs, as well as water- and land-based assaults; increased security patrols, augmented security forces, and additional security posts;

increased vehicle standoff distances and tightened facility access controls; and enhanced coordination with the law enforcement and intelligence communities.

The NRC worked with the Federal Bureau of Investigation (FBI), the Nuclear Energy Institute, and our licensees to review access lists of employees working at nuclear power plants to identify any individual whose name matched the FBI Watch List. This review revealed that there were no positive matches. NRC regulations require that individuals having unescorted access to nuclear power plants undergo a background investigation, which includes credit checks, employment history, reference examination, psychological testing, and a criminal history check conducted by the FBI. The orders issued to certain licensees require additional measures, including severe limitations on temporary unescorted access to sensitive areas of these facilities. The NRC has also reduced the processing time for background checks to facilitate careful examination of licensee personnel and contractors. For example, in many cases, the time for processing criminal history information has been reduced to approximately 24 hours.

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

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

The establishment of NSIR has facilitated an increased level of interaction among the NRC, other Federal agencies, State and local governments, as well as the international community. The NRC has also enhanced its ability to communicate critical, time-sensitive information with licensee sites. Toward that end, the NRC has placed secure telephones in all of our resident inspectors' offices at nuclear power plants and will soon have secure FAX capabilities in those

offices as well. The NRC is also in the process of obtaining security clearances for a limited number of licensee officials at each nuclear power plant, to facilitate information sharing and shared responses to security-related information.

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

Following the terrorist attacks on September 11, 2001, the NRC also alerted licensees, suppliers, and shippers of the need to enhance security against the threat of theft of radioactive material. In addition, the NRC is conducting a comprehensive evaluation of controls to protect those radioactive materials that constitute the greatest hazard to public health and safety. The NRC has also established a joint working group with the DOE to evaluate approaches for "cradle-to-grave" control of radioactive sources that might be used in radiological dispersal devices. As part of that evaluation, the NRC is working with the Agreement States to establish a consolidated listing of higher-risk materials licensees that may be subject to additional requirements for enhanced security measures. The NRC is also reexamining its import and export licensing for these high-risk isotopes and is working with the International Atomic Energy Agency on establishing a code of conduct for licensing such materials. Further, the NRC is working with the Department of Homeland Security and other agencies to ensure that the Federal Government is prepared to respond to an event involving a radiological dispersal device.

Reactor License Renewal

During FY 2002, the NRC issued renewed operating licenses for 4 commercial nuclear reactors, bringing the total to 10 units that have received renewed licenses. The NRC staff is currently reviewing 10 other applications to renew the licenses of an additional 16 units. If the NRC approves the applications under review, 25 percent of the licensed operating reactors will have extended their lifespan by 20 years. In FY 2002, the NRC expects to receive 5 additional applications to renew the licenses for 9 more units, and 6 applications for 12 units are expected in FY 2004. The staff expects that, over time, virtually all operating reactors will request license renewal.

Reactor Oversight Process

During FY 2002, the NRC continued to work with all stakeholders to evaluate the effectiveness of the Reactor Oversight Process (ROP), which has been implemented for the past 2½ years at all commercial nuclear power plants: A key part of this effort is an annual ROP self-assessment to identify "lessons learned" and areas for improvement. The NRC staff completed its calendar year 2001 assessment in April 2002. Overall, that self-assessment concluded that the ROP has been successful in supporting the NRC's performance goals. During 2001, the ROP was particularly effective in monitoring operating nuclear power plant activities, identifying significant performance issues, and ensuring that licensees took appropriate actions before plant performance became unacceptable, thereby helping to ensure that safety was maintained.

In the performance indicator (PI) area, the staff worked with the nuclear industry and other external stakeholders during a series of public meetings to develop major improvements to the PI program guidelines and implementation procedures. Feedback received from stakeholders on the PI program indicated that additional improvements were needed for some PIs. As a result, the NRC included some short-term improvements in the PI guidance, while the staff continues to work with the public and industry to revise existing PIs and develop new improved ones.

The NRC also continued to make progress toward improving the Significance Determination Process (SDP). Using this process, the NRC staff promptly dispositioned more than 95 percent of inspection findings in FY 2002. However, the staff also identified many areas for SDP improvement through self-assessment metric results and internal and external stakeholder feedback. To address these concerns, the NRC has issued and is currently implementing an SDP Improvement Strategy and Task Action Plan. Among the more significant actions, the plan includes improvements to the SDP tools, as well as the overall process and the consistency of its implementation, and an evaluation of possible approaches to assessing programmatic deficiencies.

The ROP resource expenditure data shows that the NRC has also achieved efficiencies in implementing the oversight process. To further explore areas where the agency might gain additional ROP efficiencies, the staff formed an efficiency focus group that is currently assessing a number of suggested resource savings initiatives.

In addition, as a result of the reactor pressure vessel head degradation event at the Davis-Besse Nuclear Power Station, the NRC issued bulletins to all pressurized-water reactor licensees regarding approaches to deal effectively with this type of situation to ensure the continued safety of the reactors. The NRC also issued the report of the Davis-Besse Lessons Learned

Task Force in September 2002, and will use that report to develop recommendations for future agency actions.

New Reactor Licensing

In FY 2002, the NRC completed its Future Licensing and Inspection Readiness Assessment in October 2001, in response to increased interest in possible new reactor license applications. This assessment described the work needed to ensure that the NRC will be ready to effectively carry out its responsibilities for review of early site permits, license applications, and construction of new nuclear power plants.

The NRC also completed its pre-application review of the Westinghouse AP1000 advanced light-water reactor design in March 2002. Westinghouse subsequently applied for certification of the AP1000 design on March 28, 2002.

Power Uprates

In FY 2002, the NRC staff completed reviews of 17 power uprate applications. These reviews included 8 first-of-kind extended power uprates in the 10- to 20-percent range for boiling-water reactors, a 7.5-percent extended power uprate and a 4.5-percent stretch power uprate for pressurized-water reactors, and 7 1- to 2-percent measurement uncertainty recapture power uprates. Staff approval of these applications added approximately 1,300 Megawatts Electric (MWe) to the Nation's electric generating capacity. This is equivalent to more than the generating capacity of one large nuclear power plant unit.

The staff has also completed several process improvements including issuing guidance to licensees on the content of measurement uncertainty recapture power uprates and conducting a public workshop on lessons learned from recent extended power uprates. In addition, the staff has undertaken a new initiative to develop a review standard to improve the effectiveness and efficiency of extended power uprate reviews. Based on recent surveys, the staff expects licensees to request power uprates for approximately 50 reactors over the next 5 years. If approved, these uprates would add about 1,900 MWe to the Nation's electric generating capacity, equivalent to the generating capacity of two nuclear power plant units.

Reactor Safety Research

During FY 2002, the NRC continued to develop new methods to quantitatively assess digital system and software reliability. These include a reliability model of the digital feedwater control system upgrade installed at the Calvert Cliffs nuclear power plant using a new method to demonstrate that digital instrumentation and control systems can be effectively evaluated

quantitatively. In addition, we completed a method for using software engineering measures to predict the reliability of real time instrumentation and control systems software.

The NRC also issued its final Phenomenon Identification and Ranking Table report on the applicability of the source term identified in NUREG-1465, "Accident Source Terms for Light-Water Nuclear Power Plants," to high-burnup fuels. Utilization of high-burnup fuels will result in considerable cost savings to industry, while reducing the volume of radioactive waste. The NRC staff will use this information to model the consequences of a radioactive release at a plant using high-burnup fuel to ensure that regulatory limits are satisfied.

In addition, the NRC staff issued NUREG-1742, "Perspectives Gained From the Individual Plant Examination of External Events (IPEEE) Program" (Final Report). That report discusses the dominant risk contributors, plant improvements, overall implementation strengths and weaknesses, and overall effectiveness in meeting the IPEEE objectives.

Risk-Informing Initiatives

During FY 2002, the NRC staff continued to incorporate risk information into the regulatory process by implementing initiatives documented in the Risk-Informed Regulation Implementation Plan. For example, the staff issued a report concerning, "Technical Work to Support Possible Rulemaking for a Risk-Informed Alternative to 10 CFR 50.46/GDC-35," which proposed recommendations to risk-inform requirements for emergency core coolant systems (ECCS) for nuclear power reactors. In addition, through experimental and analytical programs, the staff developed the technical bases for potential performance-based ECCS regulations and acceptance criteria and potential modifications to evaluation model requirements in Appendix K to Title 10, Part 50, of the *Code of Federal Regulations* (10 CFR Part 50). Additionally, the staff continued to incorporate risk information into materials and waste activities, as exemplified by the pilot program to risk-inform materials inspections; implementation of Manual Chapter 2604, "Licensee Performance Review," which makes the process more timely and risk-informed; and the "Yucca Mountain Review Plan," Revision 2, which implements a risk-informed approach to enable the NRC to focus its review of a potential DOE license application according to risk-significance.

Nuclear Materials

During FY 2002, the NRC staff completed studies of the Nuclear Materials program to evaluate and implement short-term recommendations that include changes to licensing and inspection. Representative examples include the pilot program to risk-inform materials inspections, and updating the series of Inspection Procedures to conform to this new approach. This led to a 20-percent efficiency gain for materials inspections.

The staff also completed the General License Tracking System to improve the accountability of generally licensed materials. The system will improve the Nation's control over such materials, thereby significantly reducing the likelihood that such materials could be lost or stolen.

Mixed-Oxide Fuel Fabrication

During FY 2002, the NRC staff issued the draft safety evaluation report (SER) for the construction authorization request (CAR) to construct a mixed-oxide fuel fabrication facility, which will convert weapons-grade plutonium into mixed-oxide fuel for use in commercial reactors approved by the NRC for such use. The draft SER documents the NRC's preliminary conclusions on the safety-related aspects of the CAR.

Nuclear Materials Safety Regulatory Reforms

During FY 2002, the NRC staff published amended regulations for medical use of byproduct materials, as established in 10 CFR Part 35. This major rule change affects approximately 7,000 medical licensees across the country. The goals of the medical use program are to focus the regulations on those medical procedures that pose the highest risk to workers, patients, and the public, and to structure the regulations to be risk-informed and more performance-based. Toward that end, the NRC worked closely with internal and external stakeholders to provide supporting guidance and training to ensure proper implementation of the rule. The resulting rule became effective for NRC licensees on October 24, 2002.

The NRC also proposed a rulemaking change to 10 CFR Part 71. As proposed, that rulemaking would make the U.S. transportation and safety requirements compatible with the most recent standards issued by the International Atomic Energy Agency and would also include changes initiated by the NRC to codify other applicable requirements.

Atlas Corporation License Termination

During FY 2002, the NRC fulfilled the requirement of the Defense Authorization Act of FY 2001 to terminate the Atlas Corporation license for the uranium mill tailing disposal site at Moab, Utah, within 1 year. In so doing, the NRC worked with the trustee, the State of Utah, and DOE to transfer the site to DOE on schedule and in a safe and stable condition.

Private Fuel Storage Licensing Process

During FY 2002, the NRC staff completed significant work on the licensing process for the Private Fuel Storage, LLC (PFS) application for a license to construct and operate an away-

from-reactor independent spent fuel storage installation on the Reservation of the Skull Valley Band of Goshute Indians, a Federally recognized Indian Tribe. This work included completing two supplements to the PFS safety evaluation report, which allowed the Atomic Safety and Licensing Board (ASLB) to conduct its safety hearings on schedule without additional delays. Those hearings were completed in early July 2002. The NRC also completed the final environmental impact statement for the PFS project with the cooperation of the Bureau of Land Management, the Bureau of Indian Affairs, and the U.S. Surface Transportation Board.

Decommissioning of Nuclear Facilities

During FY 2002, the NRC issued the final policy statement on decommissioning criteria for the West Valley Demonstration Project (WVDP). This action, mandated by the WVDP Act, required the NRC to specify the standards that are to be used to decommission this site. Given the unusual complexity of the site and the interest of the stakeholders (DOE, the U.S. Environmental Protection Agency, the State of New York, and the local public, among others), completion of the policy statement is a significant milestone that will enable site cleanup to proceed.

Waste Safety Research

During FY 2002, completed the National Academies' study concerning alternatives for the control of slightly contaminated materials with the publication of the committees' report entitled, "The Disposition Dilemma: Controlling the Release of Solid Materials from Nuclear Regulatory Commission-Licensed Facilities." This report made recommendations concerning the framework and process for addressing the control of slightly contaminated materials.

Risk Assessment of Dry Cask Storage System

During FY 2002, the NRC staff completed a pilot probabilistic risk assessment of a dry cask storage system. That pilot included a method and a screening study of dry cask storage system risks to support efforts to risk-inform the dry cask storage regulations.

High-Level Waste Activities

During FY 2002, the NRC issued the final rule for the proposed Yucca Mountain repository entitled "Implementing Regulation for Disposal of High-Level Waste at Yucca Mountain" (10 CFR Part 63), the rule is in conformance with the final EPA standard and provides the basis for regulatory requirements for DOE's potential license application. The NRC also issued Revision 2 of the "Yucca Mountain Review Plan" for public comment. That review

plan implements a risk-informed approach to enable the NRC staff to focus its review of a potential DOE license application according to risk-significance.

The NRC staff also provided prelicensing consultation with DOE, including (1) preliminary site-sufficiency comments, based on a body of work conducted during a 10-year period and the results of the NRC's performance assessment, (2) comments on DOE's final environmental impact statement, and (3) continued work to resolve the key technical issues that are most important to potential repository licensing.

In connection with its pre-application review of the Yucca Mountain repository, the NRC staff also conducted extensive outreach activities with stakeholders. Among those activities, the NRC conducted a series of public meetings to discuss the final 10 CFR Part 63 and the Yucca Mountain Review Plan at five different locations in Nevada, including the agency's first Government-to-Government meeting with Native American Tribes. These meetings and technical exchanges allowed public interaction with both the NRC and DOE.

The NRC staff also completed test protocols for the package performance study (PPS) to determine the performance of spent nuclear fuel shipping containers during severe accidents. The PPS is a multi-year research program including tests designed to (1) confirm the usefulness of analytical tools, (2) demonstrate inherent safety in spent fuel cask design, and (3) refine dose risk estimates for the public and workers. These tests are scheduled to be performed during 2004.

Workforce Planning

During FY 2002, the NRC implemented a major workforce planning process to forecast the agency's future staffing needs to assist managers in planning their human capital strategies to recruit, develop, deploy, and retain a diverse workforce. This process included completing the in-house design and development of a Web-based tool set to give managers access to workforce planning information concerning the skills, competencies, and knowledge that are currently available within the agency.

The NRC also recruited and hired more than 180 highly qualified entry-level and experienced professional permanent staff, including nuclear safety interns. This represents significant progress in addressing the aging workforce issues facing the agency. In FY 2002, there were 243 permanent hires.

Public Web Site Redesign

During FY 2002, the NRC completed the redesign and implementation of the agency's public Web site. The redesigned site contains many features to support E-Government, including media streaming of Commission meetings to enhance public participation in the regulatory process; signup for electronic information interchange with the NRC (including electronic signature capability); access to the NRC's public documents collections in electronic form via the Agencywide Documents Access and Management System (the NRC's electronic record-keeping system, known as ADAMS); access to all NRC forms on a single Web page, and a single "Contact Us" page covering all major channels for contacting the agency. The site complies with the Americans With Disabilities Act.

Rule on Electronic Maintenance and Submission of Information

During FY 2002, the NRC staff developed and published a direct final/proposed rule and guidance on Electronic Maintenance and Submission of Information. The NRC will proceed with the proposed rule path because it received substantive comments from the public. This proposed rule will help to bring the NRC's communications regulations into compliance with the Government Paperwork Elimination Act.

Electronic Information Exchange

During FY 2002, the NRC Implemented the Electronic Information Exchange (EIE) system. Currently in production on a limited basis, this system allows applicants, licensees, and vendors of commercial nuclear power plants and fuel cycle facilities to voluntarily submit documents to the NRC electronically. This capability will be further expanded when the Proposed Rule on Electronic Maintenance and Submission of Information becomes effective. EIE will play a major role and augment other capabilities in place, to enable the NRC to meet the Government Paperwork Elimination Act requirement to allow the public the option to transact business with the agency electronically, through the use of digital signature, by October 2003.

Seat Management Services

During FY 2002, the NRC implemented a performance-based seat management contract, reflecting industry best practices in the effective management of information technology resources. The contract includes replacement, maintenance, and support of the agency's desktop systems, phase-in of desktop support for regional offices and Resident Inspector Site Expansion sites, network printers, and infrastructure.

Financing the NRC Budget

The NRC's proposed FY 2004 budget will be financed by offsetting fees and direct appropriations, as shown in the following table.

FINANCING (Dollars in Thousands)			
	FY 2002	FY 2003	FY 2004
Budget Authority	558,650	584,984	626,100
Offsetting Fees	473,520	498,937	545,560
Net Appropriated			
Nuclear Waste Fund	23,650	24,900	33,100
General Fund (Homeland Security)	36,000	29,300	NA
General Fund (Percent Off Fee Base)	19,960	31,847	47,440
Total Net Appropriated	79,610	86,047	80,540

In accordance with the Omnibus Budget Reconciliation Act of 1990, as amended, the NRC's proposed FY 2004 budget is based on 92-percent fee recovery. The entire NRC budget is subject to fees, with the exception of the High-Level Waste program. This results in offsetting fees of $545.6 million in FY 2004, an increase of $46.6 million from FY 2003. Net appropriated funds decrease by $5.5 million in FY 2004.

Integration of Budget Estimates and Performance Plan

The NRC has commenced its Triennial Strategic Plan update, which will culminate in the submission of the agency's Strategic Plan for FY 2003–FY 2008 to Congress in September 2003. During this update process, the NRC plans to incorporate and address issues and events that have arisen since 1999, which will have an impact on the agency's future environment.

Strategic Arenas

To facilitate the correlation with the Strategic Plan for FY 2000–FY 2005, the FY 2004 Budget Estimates and Performance Plan are organized into the same four mission-related strategic arenas reflected in the Strategic Plan, namely Nuclear Reactor Safety, Nuclear Materials Safety, Nuclear Waste Safety, and International Nuclear Safety Support. We have

also included information on Management and Support activities and the Office of the Inspector General. For each strategic arena, we have provided a brief introduction to the arena, budget overview, strategic and performance goals and implementing strategies, performance measures, and justifications for certain program requests.

Strategic Goals

The NRC will conduct an efficient regulatory program that allows the Nation to use nuclear materials for civilian[1] purposes in a safe manner to protect the health and safety of the public and the environment by working to achieve four strategic goals. Specifically, those strategic goals are to (1) prevent radiation-related[2] deaths and illnesses, promote the common defense and security, and protect the environment in the use of civilian nuclear reactors (Nuclear Reactor Safety); (2) 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 (Nuclear Materials Safety); (3) prevent significant adverse impacts from radioactive waste to the current and future health and safety of the public and the environment and promote the common defense and security (Nuclear Waste Safety); and (4) support U.S. interests in the safe and secure use of nuclear materials and in nuclear nonproliferation (International Nuclear Safety Support).

Performance Goals

The NRC's Strategic Plan for FY 2000–FY 2005 identified four performance goals for Nuclear Reactor Safety, Nuclear Materials Safety, Nuclear Waste Safety, and International Nuclear Safety Support. Specifically, these performance goals are to (1) maintain safety, protection of the environment, and the common defense and security; (2) increase public confidence; (3) make NRC activities and decisions more effective, efficient, and realistic; and (4) reduce unnecessary regulatory burden on stakeholders.

Performance Measures

Performance measures indicate whether the NRC is achieving its strategic and performance goals. In FY 2002, the NRC established 58 strategic goal and performance goal measures, of which the agency met 56 targets. Performance targets for these measures are included in this annual performance plan. Our success in meeting these targets is reported in our annual performance reports.

Program Output Measures

In addition to performance measures, the NRC's annual performance plan includes program output measures, which link the overall level of funding requested for the strategic arena and the funding requested for specific program activities. The agency has identified actual and projected targets for key activities that play an important role in driving the strategies that are used to achieve our performance goals and their associated performance measures. In FY 2002, the NRC established 58 output measures, of which the agency met 54 targets. These output measures are closely related to funding levels, workload projections, policy assumptions, and external factors. Output measures are defined in the Justifications for Program Requests section of this document.

President's Management Agenda

The NRC's proposed FY 2004 budget supports the Governmentwide initiatives in the President's Management Agenda. To reshape our human capital management strategies, in light of the events of September 11, 2001, and to improve our alignment with the President's Management Agenda, the NRC developed restructuring initiatives that better position the agency to respond to such challenges as emerging security issues and an aging workforce. For the second year in succession, the NRC has developed human capital budget data, which describe the resources allocated to implement agencywide human capital initiatives, such as recruitment bonuses, increased entry-level hiring, retention incentives, waivers of dual compensation limitations, double-encumbering of positions to ensure knowledge transfer, and student loan repayment programs. In terms of competitive sourcing, the NRC developed a comprehensive competitive sourcing plan to ensure that the agency meets the Governmentwide goal in the Federal Activities Inventory Report concerning public-private competitions or direct conversions. In FY 2002, the NRC met its goal of 5 percent, primarily by employing the direct conversion and streamlined cost comparison methods. The NRC anticipates using both of these methods to achieve the FY 2003 goal of considering at least 10 percent of total commercial positions for competitive sourcing. In the area of Improved Financial Performance, the NRC has achieved nine consecutive, unqualified audit opinions, including an unqualified opinion for FY 2002. Quarterly cost accounting reports are provided to agency managers to assist them with analyzing the costs of their programs on a routine basis. In addition, the NRC now has an automated, single-input system for employees nationwide to enter time and labor information to support payroll, cost accounting, and fee billing. To advance Expanded Electronic Government, the NRC will work to support Governmentwide E-Government initiatives, including E-Rulemaking, E-Authentication, E-Records, and E-Hiring. In addition, the NRC is working to strengthen the agency's information technology practices by integrating capital planning, security, and enterprise architecture processes. Finally, in the area of Budget and Performance Integration, the NRC will continue for the fifth

consecutive year to combine the budget and performance plan to reflect the alignment of resources with anticipated outcomes.

NOTES

1. As used in this plan, "civilian" uses or activities refer to those commercial and other uses of nuclear materials and facilities, including certain military activities (such as at hospitals and high-level waste disposal), which the Atomic Energy Act requires to be licensed and otherwise regulated by the NRC.

2. As used in this plan, the term "radiation-related" includes other hazards associated with the production and use of radioactive materials, such as potential chemical hazards related to fuel processing.

APPROPRIATIONS LEGISLATION

PROPOSED FY 2004 APPROPRIATIONS LEGISLATION

The NRC's proposed appropriations legislation for FY 2004 is as follows:

2

Salaries and Expenses

For necessary expenses of the Commission in carrying out the purposes of the Energy Reorganization Act of 1974, as amended, and the Atomic Energy Act of 1954, as amended, including official representation expenses (not to exceed $15,000) and purchase of promotional items for use in the recruitment of individuals for employment, $618,800,000, to remain available until expended: Provided, That of the amount appropriated herein, $33,100,000 shall be derived from the Nuclear Waste Fund: Provided further, That revenues from licensing fees, inspection services, and other services and collections estimated at $538,844,000 in fiscal year 2004 shall be retained and used for necessary salaries and expenses in this account, notwithstanding 31 U.S.C. 3302, and shall remain available until expended: Provided further, that the sum herein appropriated shall be reduced by the amount of revenues received during fiscal year 2004 so as to result in a final fiscal year 2004 appropriation estimated at not more than $79,956,000.

Office of the Inspector General

For necessary expenses of the Office of the Inspector General in carrying out the provisions of the Inspector General Act of 1978, as amended, $7,300,000 to remain available until expended: Provided, That revenues from licensing fees, inspection services, and other services and collections estimated at $6,716,000 in fiscal year 2004 shall be retained and be used for necessary salaries and expenses in this account, notwithstanding 31 U.S.C. 3302, and shall remain available until expended; Provided further, That the sum herein appropriated shall be reduced by the amount of revenues received during fiscal year 2004 so as to result in a final fiscal year 2004 appropriation estimated at not more than $584,000.

Analysis of Proposed FY 2004 Appropriations Legislation

The analysis of the NRC's proposed appropriations legislation for FY 2004 is as follows:

Salaries and Expenses

1. FOR NECESSARY EXPENSES OF THE COMMISSION IN CARRYING OUT THE PURPOSES OF THE ENERGY REORGANIZATION ACT OF 1974, AS AMENDED, AND THE ATOMIC ENERGY ACT OF 1954, AS AMENDED: 42 U.S.C. 5841 et seq.

   The NRC was established by the Energy Reorganization Act of 1974, as amended (42 U.S.C. 5801 et seq.). This act abolished the Atomic Energy Commission (AEC) and transferred to the NRC all of the AEC's licensing and related regulatory functions. These functions included those of the Atomic Safety and Licensing Board Panel and the Advisory Committee on Reactor Safeguards; responsibilities for licensing and regulating nuclear facilities and materials; and conducting research for the purpose of confirmatory assessment related to licensing, regulation, and other activities, including research related to nuclear materials safety and regulation under the provisions of the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 et seq.).

2. INCLUDING OFFICIAL REPRESENTATION EXPENSES: 47 Comp. Gen. 657, 43 Comp. Gen. 305

   This language is required because of the established rule restricting an agency from charging appropriations with the cost of official representation unless the appropriations involved are specifically available therefor. Congress has appropriated funds for official representation expenses to the NRC and its predecessor, the Atomic Energy Commission, each year since FY 1950.

3. INCLUDING PURCHASE OF PROMOTIONAL ITEMS FOR USE IN THE RECRUITMENT OF INDIVIDUALS FOR EMPLOYMENT: b-247563.3, APRIL 5, 1996

   This language is required because 31 U.S.C. 1301(a) provides that appropriated funds are available only for authorized purposes. Specific statutory authority is required for purchasing items of nominal value that can be given to attract potential employees as part of the NRC's recruitment effort.

4. TO REMAIN AVAILABLE UNTIL EXPENDED:

31 U.S.C. 1301 provides that no regular, annual appropriation shall be construed to be permanent or available continuously unless the appropriation expressly provides that it is available after the fiscal year covered by the law in which it appears.

5. SHALL BE DERIVED FROM THE NUCLEAR WASTE FUND:

42 U.S.C. 10131(b)(4) provides for the establishment of a Nuclear Waste Fund to ensure that the costs of carrying out activities relating to the disposal of high-level radioactive waste and spent nuclear fuel will be borne by the persons responsible for generating such waste and spent fuel.

42 U.S.C. 10222(a)(4) provides that the amounts paid by generators or owners of these materials into the fund shall be reviewed annually to determine if any fee adjustment is needed to ensure full cost recovery.

42 U.S.C. 10134 specifically requires the NRC to license a repository for the disposal of high-level radioactive waste and spent nuclear fuel and sets forth certain licensing procedures. 42 U.S.C. 10133 also assigns review responsibilities to the NRC in the steps leading to submission of the license application. Thus, the Nuclear Waste Policy Act of 1982, as amended, establishes the NRC's responsibility throughout the repository siting process, culminating in the requirement for NRC licensing as a prerequisite to construction and operation of the repository.

42 U.S.C. 10222(d) specifies that expenditures from the Nuclear Waste Fund can be used for purposes of radioactive waste disposal activities, including identification, development, licensing, construction, operation, decommissioning, and post-decommissioning maintenance and monitoring of any repository constructed under the Nuclear Waste Policy Act of 1982, and administrative costs of the high-level radioactive waste disposal program.

6. REVENUES FROM LICENSING FEES, INSPECTION SERVICES, AND OTHER SERVICES AND COLLECTIONS SHALL BE RETAINED AND USED FOR NECESSARY SALARIES AND EXPENSES IN THIS ACCOUNT, NOTWITHSTANDING 31 U.S.C. 3302, AND SHALL REMAIN AVAILABLE UNTIL EXPENDED:

Under Title V of the Independent Offices Appropriation Act of 1952, the NRC is authorized to collect license fees. Pursuant to 31 U.S.C. 9701, any person who receives a service or thing of value from the Commission shall pay fees to cover the NRC's cost in providing such service or thing of value.

Pursuant to 42 U.S.C. 2213, the NRC is required to assess and collect annual charges from NRC licensees and certificate holders, except for the holders of any license for a Federally owned research reactor used primarily for educational training and academic research purposes. During FY 1991 through FY 2000, the aggregate amount of such charges approximated the amount of fees collected under the Independent Offices Appropriation Act of 1952 (31 U.S.C. 9701), or 100 percent of the Commission's budgetary authority, less any amount appropriated to the Commission from the Nuclear Waste Fund. Subsequently, Public Law 106-377, which enacted the Energy and Water Development Appropriations Act for FY 2001, amended 42 U.S.C. 2213 to decrease the fee recovery requirement 2 percent per year until it is reduced to 90 percent by FY 2005. Thus, the fee recovery requirement for FY 2004 is 92 percent.

31 U.S.C. 3302 requires the NRC to deposit all revenues collected to miscellaneous receipts of the Treasury unless specifically authorized by law to retain and use such revenues.

7. THE SUM HEREIN APPROPRIATED SHALL BE REDUCED BY THE AMOUNT OF REVENUES RECEIVED:

Pursuant to 42 U.S.C. 2213, the NRC is required to assess and collect annual charges from NRC licensees and certificate holders, with the exception of the holders of any license for a Federally owned research reactor used primarily for educational training and academic research purposes. During FY 1991 through FY 2000, the aggregate amount of such charges approximated the amount of fees collected under the Independent Offices Appropriation Act of 1952 (31 U.S.C. 9701), or 100 percent of the Commission's budget authority, less any amount appropriated to the Commission from the Nuclear Waste Fund. Subsequently, Public Law 106-377, which enacted the Energy and Water Development Appropriations Act for FY 2001, amended 42 U.S.C. 2213 to decrease the fee recovery requirement 2 percent per year until it is reduced to 90 percent by FY 2005. Thus, the fee recovery requirement for FY 2004 is 92 percent.

Inspector General

8. FOR NECESSARY EXPENSES OF THE OFFICE OF THE INSPECTOR GENERAL IN CARRYING OUT THE PROVISIONS OF THE INSPECTOR GENERAL ACT OF 1978, AS AMENDED:

Public Law 95-452, 5 U.S.C. app., as amended by Public Law 100-504

Public Law 100-504 amended Public Law 95-452 to establish the Office of the Inspector General within the NRC effective April 17, 1989, and to require the establishment of a separate appropriation account to fund the Office of the Inspector General.

9. TO REMAIN AVAILABLE UNTIL EXPENDED:

31 U.S.C. 1301 provides that no regular, annual appropriation shall be construed to be permanent or available continuously unless the appropriation expressly provides that it is available after the fiscal year covered by the law in which it appears.

10. REVENUES FROM LICENSING FEES, INSPECTION SERVICES, AND OTHER SERVICES AND COLLECTIONS SHALL BE RETAINED AND USED FOR NECESSARY SALARIES AND EXPENSES IN THIS ACCOUNT, NOTWITHSTANDING 31 U.S.C. 3302, AND SHALL REMAIN AVAILABLE UNTIL EXPENDED:

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NUCLEAR REACTOR SAFETY

NUCLEAR REACTOR SAFETY

The Nuclear Reactor Safety arena encompasses all NRC efforts to ensure that civilian nuclear power reactors, as well as test and research reactors, are operating in a manner that adequately protects public health and safety and the environment, protects against radiological sabotage and theft or diversion of special nuclear materials, and promotes the common defense and security. The Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974, as amended, are the foundation for regulating the Nation's civilian nuclear power industry. These efforts include reactor licensing (including power uprates and license transfers); reactor license renewal; operator licensing; financial assurance; inspection; performance assessment; new reactor licensing; identification and resolution of safety issues; reactor regulatory research; regulation development; operating experience evaluation; incident investigation; Homeland Security efforts (including threat and vulnerability assessment and emergency preparedness); emergency response; investigation of alleged wrongdoing by licensees, applicants, contractors, or vendors; imposition of enforcement sanctions for violations of NRC requirements; and reactor technical and regulatory training.

3

Budget Overview

Summary	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Budget Authority by Function ($K)				
Salaries and Benefits	170,799	184,985	198,046	13,061
Contract Support and Travel	88,475	88,692	107,770	19,078
Total Budget Authority	**259,274**	**273,677**	**305,816**	**32,139**
FTE	1,496	1,566	1,624	58

The budget request of $305.8 million and 1,624 FTE supports the regulatory oversight of 104 civilian nuclear power reactors licensed to operate.[1] The budget includes $19.6 million in FY 2003 and $33.5 million in FY 2004 to support new reactor licensing activities including early site permits, pre-application and design certification reviews, and regulatory infrastructure enhancement. The budget also includes funding to review 5 additional license renewal applications for 9 reactors in FY 2003 and 6 additional license renewal applications for 12 reactors in FY 2004.

Of the $32.1 million net increase in FY 2004, $6.0 million is associated with the Governmentwide FY 2004 pay raise and other increases in salaries and benefits. The remaining increase of $26.1 million supports new reactor licensing activities, Homeland Security, reactor license renewal, and reactor safety research activities.

Measuring Results: Strategic and Performance Goals

This strategic arena includes strategic and performance goals, measures, and strategies. The **strategic goal** is the overall outcome the NRC wants to achieve. The **performance goals** focus on outcomes and are the key contributors to achieving the strategic goal. The **performance measures** indicate whether the NRC is achieving its goal and establish the basis for performance management. These measures establish how far and how fast the agency will move in the direction established by the goals. The **strategies** describe how the NRC will achieve its performance goals and their associated measures. The strategies also provide the direct link between what the agency wants to achieve (i.e., goals) and the key activities the NRC will conduct to achieve those goals.

Strategic Goal

In the Nuclear Reactor Safety arena, the NRC will conduct an efficient regulatory program to ensure that civilian nuclear power reactors, as well as nonpower reactors, are operating in a manner that adequately protects public health and safety, promotes the common defense and security, protects the environment, and safeguards special nuclear materials used in reactors by working to achieve the following 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.

Four Performance Goals and Their Implementing Strategies

(1) **To maintain safety, protection of the environment, and the common defense and security,** the NRC will employ the following strategies:

- We will sharpen our focus on safety by continuing to assess and improve the NRC's reactor oversight process for our inspection, assessment, and enforcement activities.
- We will respond to operational events involving potential safety or safeguards consequences.
- We will evaluate operating experience and the results of risk assessments for safety implications.
- We will thoroughly evaluate applications for new reactor licenses, design certifications, and early site permits to ensure that appropriate safety standards are established and maintained.

- We will identify, evaluate, and resolve safety issues, including age-related degradation, and ensure that an independent technical basis exists to review licensee submittals to ensure that safety is maintained.

- We will ensure that changes to operating licenses and exemptions to regulations maintain safety and meet regulatory requirements.

- We will ensure that license amendments involving license transfers and power uprates maintain safety and meet regulatory requirements.

- We will ensure that safety is maintained as licenses are renewed by ensuring that aging effects will be adequately managed and that the licensing basis related to the present plant design and operation will be maintained.

- We will maintain safety by ensuring that operator licenses are issued and renewed only to qualified individuals.

- We will continue to develop and use risk-informed and less-prescriptive performance-based[2] regulatory approaches, where appropriate, to maintain safety.

- We will sharpen our focus on security, including inspection, assessment, and enforcement activities.

- We will identify, evaluate, and resolve safeguards issues.

- We will ensure that changes made to licensees' security plans meet regulatory requirements.

- We will continue to develop and incrementally use risk insights and, where appropriate, less-prescriptive performance-based regulatory approaches to maintain security.

(2) To **increase public confidence**, the NRC will employ the following strategies:

- We will make public participation in the regulatory process more accessible. We will listen to the public's concerns and involve our stakeholders more fully in the regulatory process.

- We will communicate more clearly. We will add more focus, clarity, and consistency to our message; be timely; and present candid and factual information in the proper context with respect to the risk of the activity.

- We will continue to enhance the NRC's accountability and credibility by being a well-managed, independent regulatory agency. We will increase efforts to share our accomplishments with the public.

- We will report on the performance of nuclear power facilities in an open and objective manner.

- We will continue to foster an environment in which safety issues can be openly identified without fear of retribution.

- We will continue to develop and present communication courses to facilitate more effective communication with the public in public meetings and in documents.

- We will continue to implement the plain language initiatives through staff and supervisor training in techniques for writing in clear, plain language and in including plain-language executive summaries in high-profile reports and documents.

(3) **To make NRC activities and decisions more effective, efficient, and realistic,** the NRC will employ the following strategies:

- We will use risk information to improve the effectiveness and efficiency of our activities and decisions.

- We will make agency decisions based on technically sound and realistic information.

- We will anticipate challenges posed by the introduction of new technologies and changing regulatory demands.

- We will identify, prioritize, and modify processes based on effectiveness reviews to maximize opportunities to improve those processes.

- We will maintain a strong research program that supports greater realism in our decisionmaking.

(4) To **reduce unnecessary regulatory burden on stakeholders**, the NRC will employ the following strategies:

- We will utilize risk information and performance-based approaches to reduce unnecessary regulatory burden.
- We will improve and execute our programs and processes in ways that reduce unnecessary costs to our stakeholders.
- We will improve our reactor oversight process by redirecting resources from those areas that are less important to safety.
- We will actively seek stakeholder input to identify opportunities to reduce unnecessary regulatory burden.

Performance Measures

The actual data reported for some of our strategic goal measures and the performance goal measures regarding maintaining safety are subject to change as a result of NRC analysis of reported information, as well as the receipt of newly reported information. Changes to the data will be reported and explained in future performance plan submissions.

Strategic Goal Measures

The following measures are associated with the Nuclear Reactor Safety strategic goal.

STRATEGIC GOAL MEASURES						
	FY 1999	**FY 2000**	**FY 2001**	**FY 2002**	**FY 2003**	**FY 2004**
No nuclear reactor accidents.[3]						
Target:	0	0	0	0	0	0
Actual:	0	0	0	0		
No deaths resulting from acute radiation exposures from nuclear reactors.						
Target:	0	0	0	0	0	0
Actual:	0	0	0	0		

STRATEGIC GOAL MEASURES						
	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
No events at nuclear reactors resulting in significant radiation exposures.[4]						
Target:	0	0	0	0	0	0
Actual:	0	0	0	0		
No radiological sabotage at nuclear reactors.						
Target:	0	0	0	0	0	0
Actual:	0	0	0	0		
No events that result in releases of radioactive material from nuclear reactors causing an adverse impact[5] on the environment.						
Target:	0	0	0	0	0	0
Actual:	0	0	0	0		

Performance Goal (PG) Measures

The following measures are associated with the Nuclear Reactor Safety performance goals. The associated performance goal is identified by the acronym PG and the goal number as identified in the previous section.

PERFORMANCE GOAL MEASURES						
	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
No more than one event per year identified as a significant precursor of a nuclear accident.[6] ***(PG1)***						
Target:	1 or less	1 or less	1 or less	1 or less	1 or less	1 or less
Actual:	0	0	0	0		
No statistically significant adverse industry trends in safety performance. (PG1)						
Target:	0	0	0	0	0	0
Actual:	0	0	0	0		
No events resulting in radiation overexposures[7] from nuclear reactors that exceed applicable regulatory limits. (PG1)						
Target:	0	0	0	0	0	0
Actual:	0	0	0	0		

NUCLEAR REACTOR SAFETY

PERFORMANCE GOAL MEASURES						
	FY 1999	**FY 2000**	**FY 2001**	**FY 2002**	**FY 2003**	**FY 2004**
No more than three releases per year to the environment of radioactive material from nuclear reactors that exceed the regulatory limits.[a] (PG1)						
Target:	3 or less	3 or less	3 or less	3 or less	3 or less	3 or less
Actual:	0	0	0	0		
No breakdowns of physical security that significantly weaken the protection against radiological sabotage or theft or diversion of special nuclear materials in accordance with abnormal occurrence criteria. (PG1)						
Target:	0	0	0	0	0	0
Actual:	0	0	0	0		
Complete the milestones relating to collecting, analyzing, and trending information for measuring public confidence. (PG2)						
Milestones:						
FY 2001	Conducted semiannual evaluations of all public meeting feedback forms to determine any trends in NRC public meetings.					
FY 2002	Developed recommendation for continued use of public meeting feedback form or for another method of assessing public confidence.					
FY 2003–04	Create a Web-based system to compile and analyze trends in the responses of the feedback forms to assess the agency's success in meeting performance goals					
Target:	New measure in FY 2001		Will meet target	Will meet target	Will meet target	Will meet target
Actual:			Met target	Met target		
Complete all of the public outreaches. (PG2)						
Milestones:						
FY 2001	October, November, and December 2000: Conducted regional/licensee public forums. January 2001: Issued *Federal Register* notice requesting external stakeholder feedback. Second Quarter FY 2001: Analyzed external stakeholder feedback on Reactor Oversight Process. April 2001: Conducted public lessons learned workshop.					
FY 2002	Conducted local public meetings on the draft environmental impact statement for the license renewal of Surry Units 1 and 2, North Anna Units 1 and 2, Catawba Units 1 and 2, McGuire Units 1 and 2, and Peach Bottom Units 2 and 3. Conducted public environmental scoping meetings for St. Lucie Units 1 and 2 and Ft. Calhoun.					
FY 2003	Conducted local public meetings for environmental scoping and/or draft environmental impact statements for license renewal for St. Lucie Units 1 and 2, Ft. Calhoun, Robinson, Ginna, and V.C. Summer. Conduct local public meetings near Clinton, Grand Gulf, and North Anna to describe the early site permit process.					
FY 2004	Conduct local public meetings for environmental scoping and/or draft environmental impact statements for license renewal applications that reaches this stage of the review process in FY 2004.					
Target:	New measure in FY 2001		Will meet target	Will meet target	Will meet target	Will meet target
Actual:			Met target	Met target		

PERFORMANCE GOAL MEASURES						
	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Complete the milestones specific to the agency allegation program effectiveness assessment plan. (PG2)						
Milestones: FY 2001 October 2000: Started survey pilot program. FY 2002 April 2002: Sent analysis of pilot program to Commission. The Commission has decided to discontinue survey and delete the performance goal based on SRM dated October 10, 2002. However, the regional allegation staff will continue to review feedback from individual allegers to identify potential performance problems.						
Target:	New measure in FY 2001		Will meet target	Will meet target	N/A	N/A
Actual:			Met target	Met target		
Issue Director's Decisions for petitions filed to modify, suspend, or revoke a license under 10 CFR 2.206[9] within an average of 120 days.[10] (PG2)						
Target:	New measure in FY 2001		120 days	120 days	120 days	120 days
Actual:			120 days (avg.)	126 days		
Complete those specific reactor milestones in the Risk-Informed Regulation Implementation Plan (RIRIP). (PG3)						
Milestones: FY 2001 October 27, 2000: RIRIP sent to the Commission. November 17, 2000: Commission briefed on RIRIP. August 2001: Developed final criteria and milestones. FY 2002–04 Execute milestones from RIRIP (identified at beginning of each fiscal year).						
Target:	New measure in FY 2001		Will meet target	Will meet target	Will meet target	Will meet target
Actual:			Met target	Met target		
Complete at least two key process improvements per year in selected program and support areas that increase effectiveness, efficiency, and realism. (PG3)						
Target:	New measure in FY 2001		Complete 2 key process improvements	Complete 2 key process improvements	Complete 2 key process improvements	Complete 2 key process improvements
Actual:			Completed 2 key processes	Completed 2 key processes		

PERFORMANCE GOAL MEASURES						
	FY 1999	**FY 2000**	**FY 2001**	**FY 2002**	**FY 2003**	**FY 2004**
Complete those major milestones scheduled in accordance with the Commission-approved schedules in order to support completion of license renewal applications within 30 months from receipt of application to a Commission decision, if a hearing is held; within 22 months without a hearing, beginning in FY 2003; or within 25 months without a hearing prior to FY 2003.* (PG3)						
Target:	No application scheduled	Complete Calvert Cliffs by 4/00 Oconee by 7/00	No application scheduled	Complete Hatch by 9/02 Complete Turkey Point by 10/02	Complete Surry and North Anna by 3/03** Peach Bottom by 5/03**	Complete St. Lucie by 10/03, Catawba and McGuire by 12/03, Ft. Calhoun by 11/03**, Robinson 2 by 4/04**, Ginna by 6/04**, Summer by 6/04**
Actual:	N/A	Completed Calvert Cliffs 3/00 (24 months)** Oconee completed 5/00 (23 months)**	Completed Arkansas Nuclear One, Unit 1 6/01 (17 months)**	Completed Hatch 1/02 (23 months)** Completed Turkey Point 6/02 (21 months)**		
** The target for applications that do not have a hearing is reduced from 25 to 22 months beginning in FY 2003.* *** Reviews without hearings.*						
Complete those specific milestones to reduce unnecessary regulatory burden. (PG4)						
Milestones: FY 2001 Developed a process for collecting data and identifying activities that have the greatest impact on reducing unnecessary regulatory burden while maintaining safety. FY 2002–04 Implement initiative as outlined in SECY-02-0081 with completion targeted for the end of FY 2004.						
Target:	New measure in FY 2001		Will meet target	Will meet target	Will meet target	Will meet target
Actual:			Met target	Met target		

Budget Authority and Full-time Equivalent Employment by Program

Summary	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Budget Authority by Program ($K)				
Reactor Licensing	56,032	57,855	54,122	-3,733
Reactor License Renewal	13,105	14,352	19,670	5,318
Reactor Inspection and Performance Assessment	70,497	73,610	73,172	-438
Homeland Security	26,023	17,895	33,909	16,014
New Reactor Licensing	10,000	19,628	33,491	13,863
Reactor Safety Research	57,268	60,289	61,980	1,691
Reactor Incident Response	6,993	7,457	6,307	-1,150
Reactor Technical Training	9,813	12,455	12,641	186
Reactor Enforcement Actions	1,753	1,801	1,916	115
Reactor Investigations	4,069	4,173	4,256	83
Reactor Legal Advice	2,493	2,819	2,966	147
Reactor Adjudication	1,228	1,343	1,386	43
Total Budget Authority	**259,274**	**273,677**	**305,816**	**32,139**

NUCLEAR REACTOR SAFETY

Summary	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Full-Time Equivalent Employment by Program				
Reactor Licensing	414	405	374	-31
Reactor License Renewal	81	84	100	16
Reactor Inspection and Performance Assessment	593	590	584	-6
Homeland Security	63	78	125	47
New Reactor Licensing	39	81	112	31
Reactor Safety Research	148	145	149	4
Reactor Incident Response	35	34	31	-3
Reactor Technical Training	49	72	71	-1
Reactor Enforcement Actions	15	15	15	0
Reactor Investigations	31	31	31	0
Reactor Legal Advice	21	23	24	1
Reactor Adjudication	7	8	8	0
Total FTE	**1,496**	**1,566**	**1,624**	**58**

Justification of Program Requests

The Nuclear Reactor Safety arena comprises 12 program areas. This section discusses those programs with significant activities or resource changes and identifies output measures for the remaining programs.

Reactor Licensing

	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Budget Authority by Function ($K)				
Salaries and Benefits	48,968	49,353	46,654	-2,699
Contract Support and Travel	7,064	8,502	7,468	-1,034
Total Budget Authority	**56,032**	**57,855**	**54,122**	**-3,733**
FTE	414	405	374	-31

FY 2004 Activities. The NRC is responsible for overseeing the licenses of 104 commercial nuclear power reactors. In fulfilling that responsibility, the NRC expects to complete 1,500 licensing actions to amend existing licenses (including approximately 15 requests each year to increase the power generating capacity of specific commercial reactors, commonly referred to as power uprates) (Figure 1), and 350 other licensing tasks that address issues that do not require a license amendment (Figure 2). The NRC expects to meet all established output measures including completing nuclear power plant licensing-related actions and tasks, completing the review of power uprate submittals in a timely manner, maintaining the size of the licensing action inventory at less than 1,000 actions at the end of the fiscal year (Figure 3), and ensuring that licensing actions are processed

FIGURE 1
Output Measure: Licensing actions completed per year, including conversions to improved Standard Technical Specifications (iSTS)

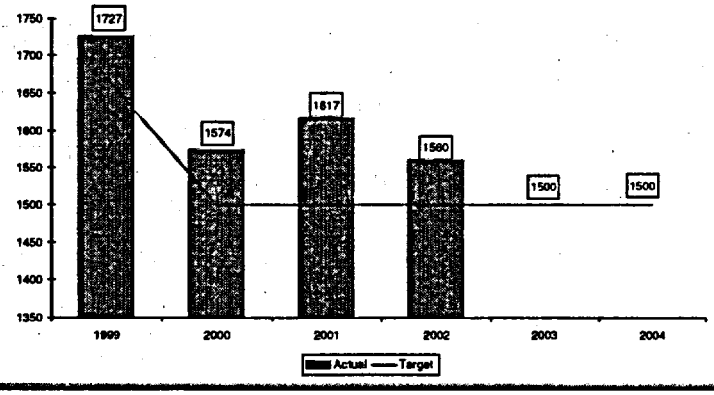
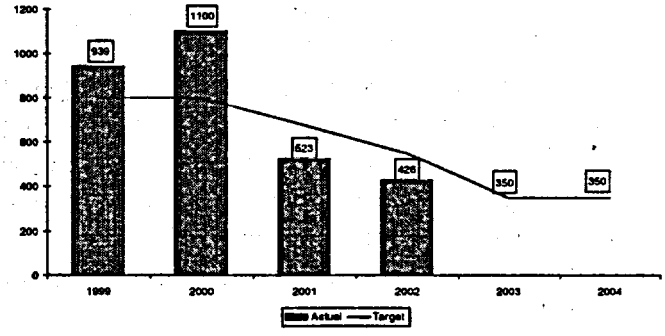


FIGURE 2
Output Measure: Other licensing tasks completed per year.*



* Output measure modified in FY 2003 from 550 to 350 to reflect the significant reduction in the inventory resulting from prior fiscal year efforts to close out generic-related tasks.

in a timely manner so that at the end of the fiscal year, 96 percent of the licensing actions in the working inventory are less than 1 year old and all actions are less than 2 years old (Figure 4).

FIGURE 3
Output Measure: Size of licensing action inventory.
(Target: ≤ number identified)

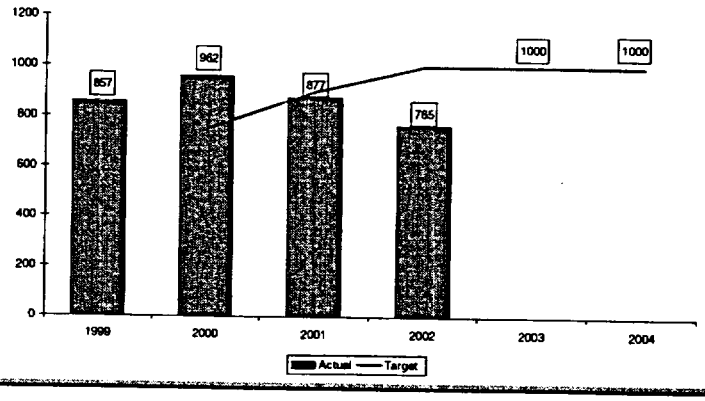


FIGURE 4
Output Measure: Age of licensing action inventory, except for license renewal and iSTS conversions.

	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Target:	80% ≤ 1 year 95% ≤ 2 years 100% ≤ 3 years	95% ≤ 1 year 100% ≤ 2 years	95% ≤ 1 year 100% ≤ 2 years	96% ≤ 1 year 100% ≤ 2 years	96% ≤ 1 year 100% ≤ 2 years	96% ≤ 1 year 100% ≤ 2 years
Actual:	86% ≤ 1 year 100% ≤ 2 years 100% ≤ 3 years	98.3% ≤ 1 year 100% ≤ 2 years	96.9% ≤ 1 year 99.9% ≤ 2 years	96.5% ≤ 1 year 100% ≤ 2 years		

FIGURE 5
*Output Measure: Number of operator licensing examinations administered, initial operator licensing examination sessions and generic fundamentals examination sessions**

	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Target:	400 initial 400 generic	565 initial 400 generic	50 initial 3 generic	50 initial 3 generic	50 initial 3 generic	50 initial 3 generic
Actual:	429 initial 265 generic	352 initial 392 generic	58 initial 3 generic	51 initial 3 generic		

* Output measure modified in FY 2001. The number of examination sessions will be reported, vice the number of examination candidates.

As part of its Reactor Licensing program, the NRC will screen and evaluate reports of approximately 2,700 events that occur at power reactors each year. The NRC is also responsible for licensing all personnel authorized to operate power reactors and will oversee reactor operator examinations each year to ensure operator competency. Toward this end, the NRC has established annual targets to measure the progress of the operator examination process which includes conducting 3 generic fundamentals examination sessions (i.e., the first in the series of examinations administered to applicants for reactor operator licenses to assess their basic knowledge of nuclear power plants) and 50 initial examination sessions to test each applicant's knowledge of a specific site (Figure 5). The NRC also develops regulations to govern the safe operation of nuclear facilities to ensure adequate protection of workers, the public, and the environment. To continue to move the agency toward a more risk-informed and/or performance-based regulation for governing the safe operation of reactors, while attempting to reduce any unnecessary regulatory burden on licensees, the NRC will work on approximately 14 active rulemakings and issue 4 to 5 final rules each year. In addition, the NRC will oversee the operation of 35 test and research reactors and their associated 300 nonpower reactor operators to ensure continued safety.

Change from FY 2003. Beginning in FY 2004, the NRC plans to increase the number of generic fundamental examinations administered from 3 to 4 per year to accommodate the needs of the industry. Each examination will be shortened from 100 to 50 questions, which will reduce the costs associated with preparing individual examinations and permit the addition of the fourth examination at no extra overall cost. The NRC does not anticipate any significant reduction in examination reliability as a result of shortening the examination. The use of an extensive bank of validated questions with known performance statistics permits the development of a shorter examination. Resources decrease to reflect the anticipated completion and consolidation of initiatives to improve the NRC's reactor licensing processes, as well as implementation of a more efficient process for completing licensing actions.

Reactor License Renewal

	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Budget Authority by Function ($K)				
Salaries and Benefits	9,612	10,284	12,514	2,230
Contract Support and Travel	3,493	4,068	7,156	3,088
Total Budget Authority	**13,105**	**14,352**	**19,670**	**5,318**
FTE	81	84	100	16

FY 2004 Activities. Nuclear power reactor licenses may be renewed beyond their original expiration dates. To determine whether a reactor can continue to operate safely during the extended period, the NRC conducts the Reactor License Renewal program. In FY 2004, the NRC will review applications and supporting documentation from licensees, conduct independent evaluations of the safety and environmental issues associated with extended reactor operation, conduct inspections to verify the information in the application and to verify the licensees' aging management activities, conduct hearings when appropriate, and make final decisions on each application (Figure 6). In addition, the NRC will continue to support regulatory framework improvements for license renewal, which include resolving generic technical and regulatory issues, updating guidance and standard review plans, and rulemaking activities. In FY 2004, the NRC expects to receive 6 new applications for renewal (12 units), in addition to the 12 applications (19 units) that are expected to be under review at that time. Of the applications under review, the NRC expects to issue 5 license renewals (8 units) in FY 2004. The NRC measures the progress of individual application reviews by tracking a series of milestones that are key to the license renewal process and that support completion of license renewal applications within

FIGURE 6

Output Measure: Completion of license renewal application reviews.

Target: Completion of those major milestones scheduled in accordance with the Commission-approved schedules in order to support completion of license renewal applications within 30 months from receipt of application to a Commission decision if a hearing is held, within 22 months without a hearing, beginning in FY 2003, or within 25 months without a hearing prior to FY 2003.

	FY 1999	*FY 2000*	*FY 2001*	*FY 2002*	*FY 2003*	*FY 2004*
Target:	*Complete milestones*	*Complete milestones for 2 applications*	*No applications scheduled*	*Complete milestones for 2 applications*	*Complete milestones for 2 applications*	*Complete milestones for 4 applications*
Actual:	*Milestones completed*	*Milestones completed for 2 applications*	*Milestones completed for 1 application*	*Milestones completed for 2 applications*		

"Output measure modified in FY 2000 to change from 36-month completion to 30-month completion. Output measure modified in FY 2002 to clarify the completion within 30 months, "if a hearing is held, and within 22 months without a hearing." Output measure modified in FY 2003 to clarify completion, "22 months without a hearing, beginning in FY 2003, or within 25 months without a hearing prior to FY 2003."

30 months of receipt if a hearing is held; within 22 months without a hearing, beginning in FY 2003; or within 25 months without a hearing prior to FY 2003.

Change from FY 2003. Resources increase to address the new license renewal applications that are expected in FY 2004.

Reactor Inspection and Performance Assessment

	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Budget Authority by Function ($K)				
Salaries and Benefits	63,534	65,462	66,452	990
Contract Support and Travel	6,963	8,148	6,720	-1,428
Total Budget Authority	**70,497**	**73,610**	**73,172**	**-438**
FTE	593	590	584	-6

FY 2004 Activities. The NRC will conduct a combined inspection and performance assessment program to ensure that the 104 licensed reactors identify and resolve safety issues before they affect safe plant operation (Figure 7). This program implements the reactor oversight process, which includes risk-informed baseline inspections, use of performance indicator data, and a reactor assessment process. The inspection process is composed of three major elements, including (1) baseline inspections that focus on licensee performance in specific functional areas and licensee effectiveness in identifying, resolving, and preventing problems; (2) plant-specific inspections that focus on followup concerning operational events and safety issues; and (3) generic issue inspections that address areas of

FIGURE 7

Output Measure: Number of plants (operating reactors) for which core/baseline inspection program is completed during the most recently ended inspection cycle.

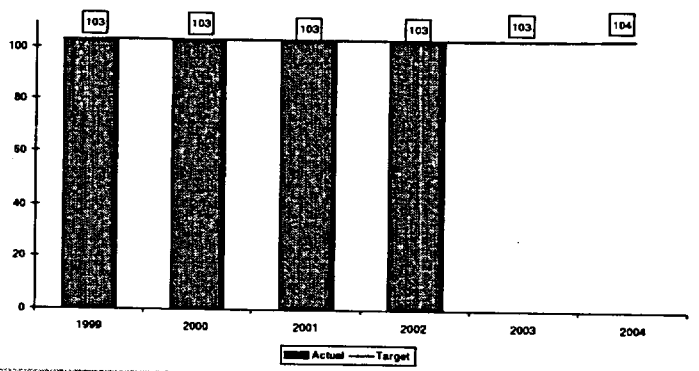


FIGURE 8

Output Measure: Time to complete reviews of allegations.*

	FY 1999	*FY 2000*	*FY 2001*	*FY 2002*	*FY 2003*	*FY 2004*
Target:	*180 days*	*180 days*	*180 days*	*70% ≤ 150 days* *100 ≤ 360 days*	*70% ≤ 150 days* *90% ≤ 180 days* *100% ≤ 360 days*	*70% ≤ 150 days* *90% ≤ 180 days* *100% ≤ 360 days*
Actual:	*116 days*	*Average 137 days*	*Average 107 days*	*84% < 150 days* *100% < 360 days*		

*Beginning in FY 2003, the target for the time to complete reviews of allegations has changed to "70% of technical allegations closed within 150 days, 90% within 180 days, and 100% within 360 days." This change will reduce the margin compared to actual performance, while allowing for the efficient use of inspection resources and the ability to refer allegations to licensees for followup.

emerging concern or those requiring increased emphasis because of recurring problems. The baseline inspection program, which is an integral part of the NRC's reactor oversight process, provides a mechanism for the NRC to remain cognizant of plant status and conditions at all 104 licensed reactors, and supports the goals and objectives of the oversight process. In addition to the activities associated with the inspection effort, NRC inspectors will also respond to approximately 450 allegations of safety and safeguards violations and provide technical support to investigative personnel (Figure 8). The performance of the allegation program is measured against goals for conducting an appropriate review of all concerns in a timely manner, while allowing for the efficient use of inspection resources.

The assessment process integrates inspection findings with other objective measures of performance (i.e., performance indicators) submitted quarterly by licensees for each power reactor site. This process provides for ongoing and annual reviews of agency observations and findings on the safety performance of operating reactor facilities and preparation of an annual assessment letter and conduct of an annual agency-level review meeting by the NRC's senior management. Assessing reactor performance also includes integrating lessons learned, overseeing the implementation of corrective actions, systematically reexamining reactor oversight activities, and continually evaluating and developing the program. To measure the progress of the assessment process, the NRC tracks specific milestones in the annual assessment cycle for each reactor, including mid-cycle and end-of-cycle performance reviews that consider both inspection findings and performance indicator data accumulated over the year, issuance of an annual assessment letter that documents the results of the assessment of each operating reactor, and the conduct of an annual agency action review meeting to discuss the appropriateness of agency actions for plants with significant performance issues, as well as trends in overall industry performance (Figure 9). As part of the NRC's ongoing assessment of each power reactor licensee's performance, the Significance Determination Process (SDP) characterizes the significance of NRC inspection findings from "green" (i.e., very low safety significance), to "red" (i.e., high safety significance). The staff's goal is to make a final SDP determination within 90 days of the finding being made public in an inspection report or other official correspondence for at least 75 percent of

FIGURE 9

Output Measure: Mid-cycle performance review and end-of-cycle performance review; annual assessment letter; and annual agency action review meeting.

	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Target:	Conduct 2 reviews per site	Conduct 2 reviews per site	Conduct 103 mid-cycle reviews and 103 end-of-cycle reviews	Conduct 103 mid-cycle reviews and 103 end-of-cycle reviews Conduct annual meeting	Conduct 103 mid-cycle reviews and 103 end-of-cycle reviews Conduct annual meeting	Conduct 104 mid-cycle reviews and 103 end-of-cycle reviews Conduct annual meeting
Actual:	2 per site conducted	1 review per site conducted*	Conducted 103 mid-cycle reviews 11/00 Conducted 103 end-of-cycle reviews 5/01 Letter and meeting 6/01	Conducted 103 end-of-cycle reviews 2/02 Letters and annual meeting 4/02 Conducted 103 mid-cycle reviews 8/02		

*1 plant performance review per site conducted in 2nd quarter. Given implementation of reactor assessment process in April 2000, schedule for next review moved from 4th quarter to the 1st quarter of FY 2001 with mid-cycle reviews to be conducted after the first 6 months of implementation of the revised process.

all potentially greater-than-green findings. This target percentage will increase by 5 percent each year, up to 90 percent in FY 2006.

Change from FY 2003. Overall, resources decrease because of the reduction in staffing that results from the implementation of efficiencies in the inspection process, together with the decrease in contract support that results from completion of procedures to address fire protection at plants and the accelerated completion of infrastructure supporting the Significance Determination Process used by the NRC staff in evaluating inspection findings to determine their safety significance.

Homeland Security

	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Budget Authority by Function ($K)				
Salaries and Benefits	7,596	9,567	16,755	7,188
Contract Support and Travel	18,427	8,328	17,154	8,826
Total Budget Authority	**26,023**	**17,895**	**33,909**	**16,014**
FTE	63	78	125	47

FY 2004 Activities. The NRC will ensure nuclear reactor safety in the current threat environment. Activities will include rulemaking and development of regulatory guidance to implement a revised design-basis threat for power reactor licenses, completion of vulnerability assessments for facilities other than nuclear power plants, and actions to ameliorate any critical vulnerabilities.

The NRC will complete rulemaking on access authorization and fitness-for-duty to enhance the protection against an insider threat and will assess the threat posed by cyberterrorism. Effort will continue to be dedicated to the review of intelligence information and coordination with Federal and State agencies, and further developing and streamlining communication channels. Full security performance reviews, including force-on-force exercises, will be carried out at each nuclear power plant on a 3-year cycle instead of the 8-year cycle used before September 11, 2001. These reviews will also include tabletop exercises that, since July 2002, have involved a wide array of Federal, State, and local law enforcement and emergency planning officials.

Research activities will include developing prevention and mitigation strategies that may be undertaken by NRC licensees or by the Federal Government at a reasonable cost to reduce any critical vulnerabilities identified by the vulnerability assessments of NRC-licensed facilities. Technical studies will be performed to characterize the insider threat, and force-on-force simulation technology will be developed and applied to assist the agency in evaluating tabletop exercises and the robustness of licensees' defensive strategies and law enforcement take-back strategies. Tests will be run to provide data on the heatup and degradation of spent fuel to determine the potential for zirconium fire propagation in the spent fuel pool, in order to reduce the uncertainty in the modeling of the vulnerability of decommissioning and operating power reactors. Offsite consequence modeling techniques will be improved and simulation tools will be validated and used to model fire propagation to reduce the uncertainty in the estimates of the vulnerabilities of facilities. Computer

analysis codes will be validated and used to estimate the consequences of radiological dispersal devices.

Change from FY 2003. Resources have been added to support increased licensing and inspection activities attributable to a changing regulatory framework, the continuance of full security performance reviews (including force-on-force exercises at each nuclear power plant on a 3-year cycle), resolution of technical issues related to cybersecurity, performance of tests to validate simulation tools, several rulemaking activities, and enhanced governmental coordination.

New Reactor Licensing

	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Budget Authority by Function ($K)				
Salaries and Benefits	4,678	10,009	14,191	4,182
Contract Support and Travel	5,322	9,619	19,300	9,681
Total Budget Authority	**10,000**	**19,628**	**33,491**	**13,863**
FTE	39	81	112	31

FY 2004 Activities. In response to renewed interest in building nuclear power plants, the NRC will conduct pre-licensing and licensing reviews in a manner that is generally consistent with projected industry plans and schedules. The NRC will also support technical reviews of early site permit applications (2 reviews will begin in FY 2003 and 1 in FY 2004) and inspection activities focusing on quality assurance programs and implementation, site preparation, and environmental protection considerations. The NRC will also continue its pre-application review of the General Electric ESBWR, Atomic Energy of Canada, Limited's ACR-700, the General Atomics GT-MHR, Westinghouse IRIS, and Framatome's SWR-1000 design. In addition, the NRC will continue its design certification review of the Westinghouse AP1000 passive light-water reactor.

In addition to specific reviews, the NRC will continue developing and updating its regulatory framework to accommodate new and advanced reactor designs. These efforts will include rulemakings to improve effectiveness and efficiency of new reactor licensing reviews; development of regulatory guidance, NUREG documents, standard review plans, and the NRC's Construction Inspection program; and development of analytical tools, experimental data, and bases for regulatory guidance documents to support the licensing of new designs. The NRC will also provide legal support and representation with respect to applications for early site permits and design certifications. The NRC has identified specific targets to use in measuring its progress in developing the Construction Inspection program, completing rulemaking activities, and developing regulatory guidance to address the new designs.

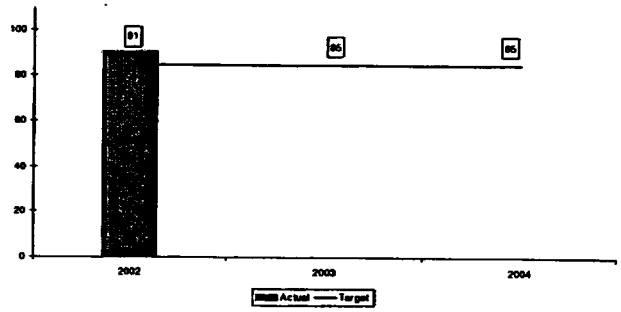
Change from FY 2003. Resources increase to support projected industry plans and schedules.

Reactor Safety Research

	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Budget Authority by Function ($K)				
Salaries and Benefits	18,350	18,600	19,565	965
Contract Support and Travel	38,918	41,689	42,415	726
Total Budget Authority	**57,268**	**60,289**	**61,980**	**1,691**
FTE	148	145	149	4

FY 2004 Activities. The NRC conducts reactor safety research to support its mission of ensuring that its licensees safely design, construct, and operate civilian nuclear reactor facilities. The NRC's critical research programs are the highest priority needs identified at the beginning of each fiscal year and typically respond to high-priority needs from the Commission and NRC's licensing organizations. In response to the output measure of timeliness of completing actions on critical programs, the agency will respond to high-priority needs on or before their due date 85 percent of the time (Figure 10). Timeliness is measured across arenas.

FIGURE 10
Output Measure: Timeliness of completing actions on critical programs.*
(Percent of major milestones met on or before their due date)

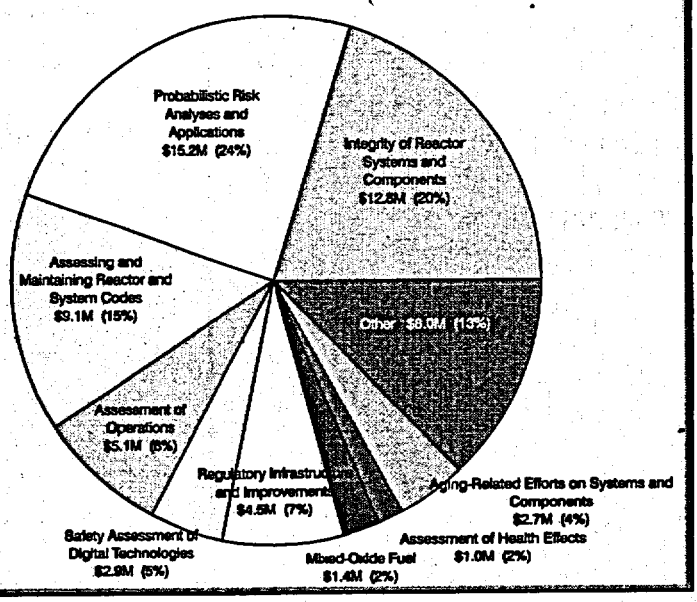


*Definition: Critical research programs typically respond to high-priority needs from the Commission and NRC's licensing organizations. Critical research programs will be the highest priority needs identified at the beginning of each fiscal year. In FY 2002, the highest priority needs include vulnerabilities assessment, new reactor licensing, pressurized thermal shock, control rod drive mechanism, 10 CFR 50.46, and operating experience assessment.

To support the NRC's performance goal of maintaining safety, the research will address the integrity of reactor systems and components, which includes testing environmentally assisted cracking of reactor pressure boundary components and vessel internals, reactor pressure vessel integrity, inservice inspection effectiveness and reliability, steam generator tube integrity, and piping integrity.

The NRC will work on probabilistic risk analyses and applications, which include research activities that support risk-informing the agency's regulations, technical standards, and oversight practices.

FIGURE 11



This may involve changes to various agency procedures and documents, regulatory guides, and standard review plans. Some of these activities will involve international cooperative efforts.

Research related to assessing and maintaining reactor and systems codes will include activities related to maintaining and assessing the accuracy of computer programs used to perform safety analyses of nuclear reactor designs. These analyses involve the prediction of thermal-hydraulic, fuel, severe accident, and neutronics behavior. The NRC's research will include assessment of operations activities to confirm the adequacy of existing acceptance criteria for high fuel burnup and synergistic effects that are attributable to design and operational changes.

In addition to the above issues, research will continue during the planning period to address other issues, including safety assessment of digital technologies; aging-related effects on systems and components, which includes environmental qualification of electric cables, assessing the adequacy of safety margins for reactor containments, and passive structures and components; regulatory infrastructure and improvements initiatives to focus on generic safety issues, regulatory effectiveness, impact of advancements in earth sciences, and codes and standards; preparation for mixed-oxide fuel licensing; and assessment of health effects to include advances in technology for assessing the potential health effects from releases of radioactive materials.

Change from FY 2003. Resources increase to reflect an increased number of risk-informed changes that will be investigated and instituted during FY 2004, inclusion of a new initiative to evaluate aging effects on the performance of important plant equipment, and a new initiative to develop technical bases for higher enriched fuels.

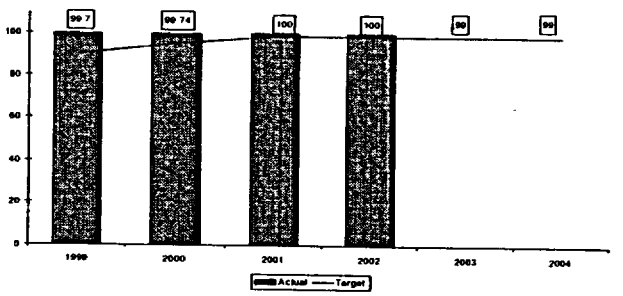
Additional Output Measures

The measure for the Reactor Incident Response program (Figure 12) serves as a method for measuring the degree of the agency's responsiveness to an emergency situation.

FIGURE 12

Output Measure: Emergency Response Performance Index (ERPI).*

(Percent)



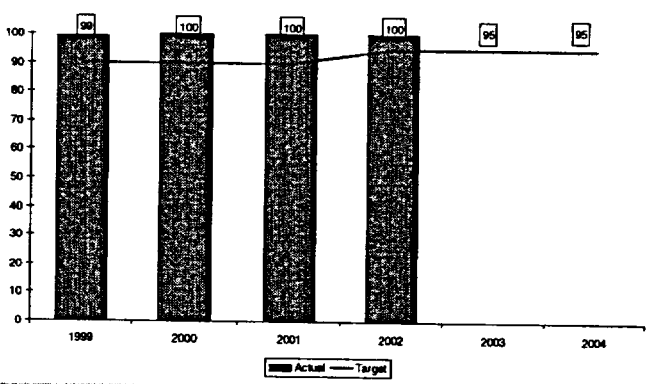
* Definition: Index provides the single overall measure of the degree to which the agency believes it is ready to respond to an emergency situation. It serves as a method for measuring disparate activities that comprise the elements of the Reactor Incident Response program. It will be determined by averaging the degree to which each of the following program functions meets the goal of 99%: Response Organization Staffing, Response Facility Availability, Communications Reliability, Response Organization Training, and 24-Hour Notification Point. If the index falls below or approaches its target value of 99%, management will determine what is contributing most to the decline and conduct appropriate corrective measures based on this review.

The Reactor Technical Training program (Figure 13) tracks the degree to which the numbers and types of reactor technical training courses offered match the cumulative technical training needs within the Nuclear Reactor Safety arena.

FIGURE 13

Output Measure: Number and types of reactor technical training courses offered.

Target: Number and types of courses offered will meet cumulative needs identified by offices and regions in semiannual needs surveys.



The Reactor Enforcement Actions program (Figure 14) reflects implementation and oversight of the Reactor Enforcement program.

FIGURE 14

Output Measure: Timeliness in completing enforcement actions.

	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Target:	90% ≤ 90 days (average) 100% ≤ 120 days (average)	90% ≤ 90 days (average)	90% ≤ 90 days (average)	Investigation 100% ≤ 360 days Non-Investigation 100% ≤ 180 days	Investigation 100% ≤ 360 days Non-Investigation 100% ≤ 180 days	Investigation 100% ≤ 360 days Non-Investigation 100% ≤ 180 days
Actual:	90% in 75.2 days (average) 100% in 90.6 days (average)	90% in 67.5 days (average) 27 cases	90% in 76 days (average) 24 cases	Investigation 100% ≤ 360 days (4 cases) Non-Investigation 100% ≤ 180 days (23 cases)		

*Output measure modified in FY 2002 to distinguish between Investigation cases and Non-Investigation cases.

The Reactor Investigations program measures timeliness in completing investigations of reactor-related wrongdoing (Figures 15 and 16).

FIGURE 15

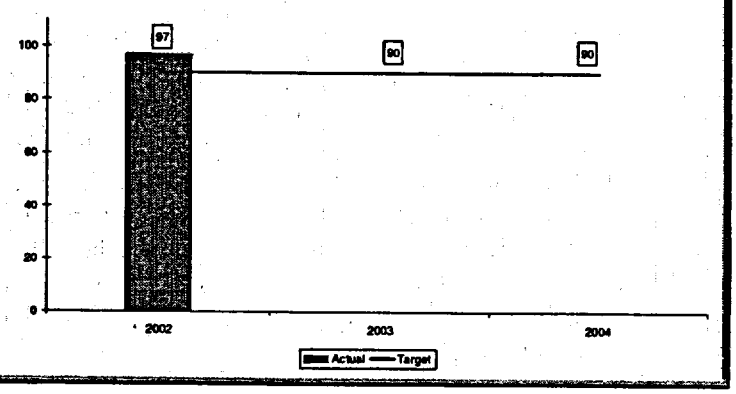
Output Measure: Percentage of cases closed on the merits as either substantiated or unsubstantiated will be completed in 10 months or less.*

	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Target:	Complete cases ≤9 months (average) Active inventory ≤ 9%	Complete cases ≤ 9 months (average) Active inventory ≤ 9%	Complete cases ≤ 9 months (average) Active inventory ≤ 9%	Complete cases 80% ≤ 10 months	Complete cases 80% ≤ 10 months	Complete cases 80% ≤ 10 months
Actual:	Completed in 6.3 months (average) 8.4% open for > 12 months	Completed in 5.6 months (average) (153 cases) 6% open for > 12 months	Completed in 7.3 months (average) (131 cases)	84% cases completed ≤ 10 months		

*Output measure modified in FY 2002 from "timeliness in completing investigations (average time to complete cases)."

FIGURE 16

Output Measure: Percentage of Office of Investigation cases will be investigated to a conclusion on the merits as either substantiated or unsubstantiated.



ARENA NOTES

1. Includes Browns Ferry Unit 1, which has no fuel loaded and requires Commission approval to restart.

2. Stated succinctly, "risk-informed, performance-based regulation" is an approach in which risk insights, engineering analysis and judgment, and performance history are used to (1) focus attention on the most important activities, (2) establish objective criteria based upon risk insights for evaluating performance, (3) develop measurable or calculable parameters for monitoring system and licensee performance, and (4) focus regulatory decisionmaking on the results.

3. "Nuclear reactor accidents" are defined in the NRC's Severe Accident Policy Statement (50 *Federal Register* 32138, August 8, 1985) as those accidents which result in substantial damage to the reactor core, whether or not serious offsite consequences occur.

4. "Significant radiation exposures" are defined as those that result in unintended permanent functional damage to an organ or a physiological system as determined by a physician in accordance with Abnormal Occurrence Criterion I.A.3.

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, to 10 CFR Part 20].

6. Such events have a probability of 1/1000 (10^{-3}) or greater of leading to a reactor accident.

7. "Overexposures" are those that exceed limits as provided by 10 CFR 20.2203(a)(2), excluding instances of overexposures involving a shallow dose equivalent from a discrete radioactive particle in contact with the skin.

8. Releases that have a 30-day reporting requirement under 10 CFR 20.2203(a)(3).

9. 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 been granted and identifies the actions that the NRC staff has taken or will take to grant the petition in whole or in part. Similarly, if the petition is denied, the Director's Decision explains the bases for the denial and discusses all matters raised by the petitioner in support of the request.

10. The start of the 120-day period is the date that the Petition Review Board 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 issuance of a new acknowledgment letter.

NUCLEAR MATERIALS SAFETY

NUCLEAR MATERIALS SAFETY

The Nuclear Materials Safety arena encompasses NRC efforts to ensure that NRC-regulated aspects of nuclear fuel cycle facilities and nuclear materials activities are handled in a manner that adequately protects public health and safety and promotes the common defense and security. This arena encompasses more than 20,000 specific and 150,000 general licensees that will be regulated by the NRC and 34 Agreement States[1] in FY 2004. This diverse regulated community includes uranium extraction, conversion, and 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. The Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974, as amended, and the Uranium Mill Tailings Radiation Control Act of 1978, as amended, provide the foundation for regulating the Nation's civilian uses of nuclear materials.

The scope of regulatory activities carried out under this arena includes regulation and guidance development; nuclear materials research; licensing/certification, inspection, and enforcement activities; identification and resolution of safety and safeguards issues; improved regulatory control of radiological sources; operating experience evaluation; incident investigation; threat assessment; emergency response; technical training; implementation of State and Tribal programs (Agreement State and State Liaison); and investigation of alleged wrongdoing by licensees, applicants, certificate holders, and contractors.

Budget Overview

	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Budget Authority by Function ($K)				
Salaries and Benefits	43,196	44,380	45,907	1,527
Contract Support and Travel	15,629	15,884	25,327	9,443
Total Budget Authority	**58,825**	**60,264**	**71,234**	**10,970**
FTE	387	384	384	0

The budget request of $71.2 million and 384 FTE supports the regulation of 37 fuel cycle facilities (encompassing 17 nuclear fuel facilities, 15 uranium recovery facilities, 2 gaseous diffusion

enrichment facilities, 1 mixed-oxide (MOX) fuel fabrication facility, and 2 gas centrifuge facilities consisting of 1 lead cascade facility and 1 full-scale facility) and approximately 4,900 nuclear materials licenses. Regulatory activities include licensing and inspection activities, as well as related Homeland Security activities.

The increase of $11 million reflects an increase of $1.5 million due to the Governmentwide FY 2004 pay raise. The remaining increase of $9.5 million is for Homeland Security activities, particularly to improve regulatory control of radiological sources. The objective of this effort is to prevent potential dispersal of radiological materials for unintended and harmful use, potentially in radiological dispersal devices. These resources will be used to improve accountability of radiological sources, including establishment and maintenance of a registry.

Measuring Results: Strategic and Performance Goals

This strategic arena includes strategic and performance goals, measures, and strategies. The **strategic goal** is the overall outcome the NRC wants to achieve. The **performance goals** focus on outcomes and are the key contributors to achieving the strategic goal. The **performance measures** indicate whether the NRC is achieving its goals and establish the basis for performance management. These measures establish how far and how fast the agency will move in the direction established by the goals. The **strategies** describe how the NRC will achieve its performance goals and their associated measures. The strategies also provide the direct link between what the agency wants to achieve (i.e., goals) and the key activities the NRC will conduct to achieve those goals.

Strategic Goal

In the Nuclear Materials Safety arena, the NRC will conduct an efficient regulatory program that allows the Nation to use nuclear materials for civilian purposes in a safe manner to protect public health and safety and the environment by working to achieve the following strategic goal:

> Prevent radiation-related deaths and illnesses, promote the common defense and security, and protect the environment in the use of source, byproduct, and special nuclear material.[2]

Four Performance Goals and Their Implementing Strategies

(1) **To maintain safety, protection of the environment, and the common defense and security, the NRC will employ the following strategies:**

- We will continue to improve the regulatory framework[3] to increase our focus on safety and safeguards, including incremental use of risk-informed and, where

appropriate, less-prescriptive performance-based regulatory approaches[4] to maintain safety.

- We will continue authorizing licensee activities only after determining that those proposed activities will be conducted in a manner that is consistent with the regulatory framework.

- We will confirm that licensees understand and carry out their primary responsibility for conducting activities in a manner that is consistent with the regulatory framework.

- We will respond to operational events involving potential safety or safeguards consequences.

- We will maintain safety by continuing to encourage the Agreement States to join the NRC in pursuing an active role in the regulatory process.

(2) To **increase public confidence,** the NRC will employ the following strategies:

- We will make public participation in the regulatory process more accessible. We will listen to the public's concerns and involve our stakeholders more fully in the regulatory process.

- We will communicate more clearly. We will add more focus, clarity, and consistency to our message; be timely; and present candid and factual information in the proper context with respect to the risk of the activity.

- We will continue to enhance the NRC's accountability and credibility by being a well-managed, independent regulatory agency. We will increase efforts to share our accomplishments with the public.

- We will continue to foster an environment in which safety issues can be openly identified without fear of retribution.

- We will continue to develop and present communication courses to facilitate more effective communication with the public in public meetings and in documents.

- We will continue to implement the plain language initiatives through staff and supervisor training in techniques for writing in clear, plain language and in including plain-language executive summaries in high-profile reports and documents.

(3) **To make the NRC activities and decisions more effective, efficient, and realistic,** the NRC will employ the following strategies:

- We will continue to improve the regulatory framework to increase our effectiveness, efficiency, and realism.
- We will identify, prioritize, and modify processes based on effectiveness reviews to maximize opportunities to improve those processes.
- We will improve efficiency and effectiveness by continuing to encourage the Agreement States to join the NRC in pursuing an active role in the regulatory process.

(4) **To reduce unnecessary regulatory burden on stakeholders,** the NRC will employ the following strategies:

- We will continue to improve our regulatory framework in order to reduce unnecessary regulatory burden.
- We will improve and execute our programs and processes in ways that reduce unnecessary costs to our stakeholders.
- We will actively seek stakeholder input to identify opportunities to reduce unnecessary regulatory burden.

Performance Measures

The actual data reported for some of our strategic goal measures and the performance goal measures regarding maintaining safety are subject to change as a result of NRC analysis of reported information, as well as the receipt of newly reported information. Changes to the data will be reported and explained in future performance plan submissions.

NUCLEAR MATERIALS SAFETY

Strategic Goal Measures

The following measures are associated with the Nuclear Materials Safety strategic goal.

STRATEGIC GOAL MEASURES						
	FY 1999	**FY 2000**	**FY 2001**	**FY 2002**	**FY 2003**	**FY 2004**
No deaths resulting from acute radiation exposures from civilian uses, including malevolent uses, of source, byproduct, or special nuclear materials, or deaths from other hazardous materials used or produced from licensed material.						
Target:	0	0	0	0	0	0
Actual:	0	0	0	0		
No more than six events per year resulting in significant radiation or hazardous material exposures [5] from the loss or use of source, byproduct, and special nuclear materials.						
Target:	N/A	6 or less	6 or less	6 or less	6 or less	6 or less
Actual:	4[6]	0	0	0		
No losses, thefts, or diversion of formula quantities of strategic special nuclear material, radiological sabotage, or unauthorized enrichment of special nuclear material regulated by the NRC. [7]						
Target:	0	0	0	0	0	0
Actual:	0	0	0	0		
No events resulting in releases of radioactive material resulting from civilian uses, including malevolent uses, of source, byproduct, or special nuclear materials that cause an adverse impact on the environment. [8]						
Target: *	0	0	0	0	0	0
Actual:	0	0	0	0		
** Measure modified in FY 2002 to include the phrase "malevolent uses." The change reflects the impact on this measure attributable to the terrorist attacks on September 11, 2001.*						
No unauthorized disclosures or compromise of classified information causing damage to national security. [9]						
Target:	0	0	0	0	0	0
Actual:	0	0	0	0		

Performance Goal (PG) Measures[10]

The following measures are associated with the Nuclear Materials Safety performance goals. The associated performance goal is identified by the acronym PG and the goal number as identified in the previous section.

PERFORMANCE GOAL MEASURES						
	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
No more than 300 losses of control[11] of licensed material per year.[12] (PG1)						
Target:	N/A	356 or less	350 or less	300 or less	300 or less	300 or less
Actual:	247[13]	265[14]	244[15]	266		
No occurrences of accidental criticality. (PG1)						
Target:	0	0	0	0	0	0
Actual:	0	0	0	0		
No more than 30 events per year[13] resulting in radiation overexposures[16] from radioactive material that exceed applicable regulatory limits. (PG1)						
Target:	N/A	19 or less	40 or less	30 or less	30 or less	30 or less
Actual:	25[17]	18[17]	27[18]	25		
No more than 45 medical events per year.[19] (PG1)						
Target:	N/A	43 or less	45 or less	45 or less	45 or less	45 or less
Actual:	36[20]	37[17]	33[17]	32		
No more than 5 releases per year[10] to the environment of radioactive material from operating facilities that exceed the regulatory limits.[21] (PG1)						
Target:	N/A	39 or less	6 or less	5 or less	5 or less	5 or less
Actual:	2[23]	2[23]	0	3		
No more than five substantiated cases per year of attempted malevolent use[22] of source, byproduct, or special nuclear material. (PG1)						
Target:	N/A	5 or less	5 or less	5 or less	5 or less	5 or less
Actual:	2[23]	2	0	0		
No non-radiological events that occur during the NRC-regulated operations that cause impacts on the environment that cannot be mitigated within applicable regulatory limits, using reasonably available methods.[24] (PG1)						
Target:	0	0	0	0	0	0
Actual:	0	0	0	0		
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.[25] (PG1)						
Target:	0	0	0	0	0	0
Actual:	0	0	0	0		

PERFORMANCE GOAL MEASURES						
	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Complete the milestones relating to collecting, analyzing, and trending information for measuring public confidence. (PG2)						
FY 2001 FY 2002 FY 2003–04	Conducted semiannual evaluations of all public meeting feedback forms to determine any trends in NRC public meetings. Developed recommendation for continued use of public meeting feedback form or for another method of assessing public confidence. Create a Web-based system to compile and analyze trends in the responses of the feedback forms to assess the agency's success in meeting performance goals.					
Target:			Will meet target	Will meet target	Will meet target	Will meet target
Actual:	New measure in FY 2001		Met target	Met target		
Complete all of the public outreaches. (PG2)						
Milestones:						
FY 2001	October 2000: Developed MOX fuel Web site. February 2001: Issued first MOX fuel newsletter. May 2001: Conducted environmental impact statement public scoping meeting. May, July, September 2001: Conducted MOX followup public meetings.					
FY 2002	Conducted Workshops on 10 CFR Part 35 (Workshops to be held prior to effective date). Conducted Fuel Cycle Oversight Revision Process public meeting. Conducted Uranium Recovery Workshop. Issued MOX draft environmental impact statement and conducted public meeting in the vicinity of the plant. Issued MOX draft safety evaluation report and conducted public meeting in the vicinity of the plant. Participated in OAS Annual Meeting. Participated in Conference of Radiation Control Program Directors Annual Meeting.					
FY 2003	Conduct MOX public meeting in the vicinity of the plant. Conduct public meetings on MOX draft environmental impact statement. Conduct public meetings for approximately five licensee performance reviews. Conduct Uranium Recovery Workshop. Conduct two public meetings in the vicinity of the selected U.S. Enrichment Corporation (USEC) gas centrifuge lead cascade plant site. Conduct two public meetings and an EIS scoping meeting in the vicinity of the selected Louisiana Energy Services gas centrifuge plant site. Participate in OAS Annual Meeting. Participate in Conference of Radiation Control Program Directors Annual Meeting.					
FY 2004	Conduct public meeting to discuss MOX final safety evaluation report results. Conduct public meetings for approximately five licensee performance reviews. Conduct Uranium Recovery Workshop. Conduct public meetings related to gas centrifuge licensing applications in the vicinity of the selected gas centrifuge sites. Participate in OAS Annual Meeting. Participate in Conference of Radiation Control Program Directors Annual Meeting.					
Target:			Will meet target	Will meet target	Will meet target	Will meet target
Actual:	New measure in FY 2001		Met target	Met target[26]		

PERFORMANCE GOAL MEASURES						
	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Complete the milestones specific to the agency allegation program effectiveness assessment plan. (PG2)						
Milestones: FY 2001 FY 2002	October 2000: Participated in agency's pilot program. April 2002: Sent analysis of pilot program to Commission. The Commission has decided to discontinue survey and delete performance goal based on SRM dated October 10, 2002. However, the regional allegation staff will continue to review feedback from individual allegers to identify potential performance problems.					
Target:	New measure in FY 2001		Will meet target	Will meet target	N/A	N/A
Actual:			Met target	Met target		
Issue Director's Decisions for petitions filed to modify, suspend, or revoke a license under 10 CFR 2.206 [27] within an average of 120 days.[28] (PG2)						
Target:	New measure in FY 2001		120 days	120 days	120 days	120 days
Actual:			No petitions received	No petitions received		
Complete those specific materials milestones in the Risk-Informed Regulation Implementation Plan (RIRIP). (PG3)						
Milestones: FY 2001 FY 2002–04	October 27, 2000: RIRIP sent to the Commission. November 17, 2000: Commission briefed on RIRIP. August 2001: Developed final criteria and milestones. Execute milestones from the RIRIP (identified at beginning of each fiscal year).					
Target:	New measure in FY 2001		Will meet target	Will meet target	Will meet target	Will meet target
Actual:			Met target	Met target		
Complete at least two key process improvements per year in selected program and support areas that increase efficiency, effectiveness, and realism. (PG3)						
Target:	New measure in FY 2001		Will complete 2 key processes	Will complete 2 key processes[29]	Will complete 2 key processes[30]	Will complete 2 key processes
Actual:			Completed 4 key processes[31]	Completed 2 key processes[32]		

NUCLEAR MATERIALS SAFETY

PERFORMANCE GOAL MEASURES						
	FY 1999	**FY 2000**	**FY 2001**	**FY 2002**	**FY 2003**	**FY 2004**
Complete those specific milestones to reduce unnecessary regulatory burden. (PG4)						
Milestones:						
FY 2001	Completed 10 CFR Part 35 rulemaking (medical).					
FY 2002–04	Complete at least one rulemaking primarily designed to reduce unnecessary regulatory burden.					
Target:	New measure in FY 2001		Will meet target	Will meet target	Will meet target	Will meet target
Actual:			Did not meet target.[33]	Met target, 10 CFR Part 35, Medical Use of Byproduct Material		
Reduce paperwork and record keeping imposed by the NRC on its licensees by at least 25 percent over a period of 5 years. (PG4)						
Target:	New measure in FY 2001		5 percent reduction from FY 2000 baseline	10 percent reduction from FY 2000 baseline	15 percent reduction from FY 2000 baseline	20 percent reduction from FY 2000 baseline
Actual:			Did not meet target.[34]	Met target: achieved 16% reduction from FY 2000 baseline		

NUCLEAR MATERIALS SAFETY

Budget Authority and Full-time Equivalent Employment by Program

Summary	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Budget Authority by Program ($K)				
Fuel Facilities Licensing and Inspection	12,152	13,080	13,666	586
Nuclear Materials Users Licensing and Inspection	27,149	26,727	25,960	-767
Homeland Security	6,473	6,405	17,661	11,256
Materials Safety Research	1,410	1,785	1,734	-51
Materials Incident Response	268	285	254	-31
Materials Technical Training	2,251	2,570	2,559	-11
Materials Enforcement Actions	922	955	981	26
Materials Investigations	1,411	1,447	1,482	35
State and Tribal Programs	4,232	4,517	4,633	116
Materials Legal Advice	1,753	1,681	1,478	-203
Materials Adjudication	804	812	826	14
Total Budget Authority	**58,825**	**60,264**	**71,234**	**10,970**

NUCLEAR MATERIALS SAFETY

Summary	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Full-Time Equivalent Employment by Program				
Fuel Facilities Licensing and Inspection	96	97	99	2
Nuclear Materials Users Licensing and Inspection	186	174	163	-11
Homeland Security	20	25	35	10
Materials Safety Research	5	6	7	1
Materials Incident Response	2	2	2	0
Materials Technical Training	8	9	9	0
Materials Enforcement Actions	8	8	8	0
Materials Investigations	11	11	11	0
State and Tribal Programs	31	33	33	0
Materials Legal Advice	15	14	12	-2
Materials Adjudication	5	5	5	0
Total FTE	**387**	**384**	**384**	**0**

Justification of Program Requests

The Nuclear Materials Safety arena comprises 11 program areas. This section discusses those programs with significant activities or resource changes and identifies output measures for the remaining programs.

Fuel Facilities Licensing and Inspection

	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Budget Authority by Function ($K)				
Salaries and Benefits	10,797	11,319	11,835	516
Contract Support and Travel	1,355	1,761	1,831	70
Total Budget Authority	**12,152**	**13,080**	**13,666**	**586**
FTE	96	97	99	2

FY 2004 Activities. Resources are provided to conduct the NRC's regulatory programs at facilities in the fuel cycle. Major activities include supporting the recertification of the two gaseous diffusion plants (GDPs) and licensing reviews of a lead cascade gas centrifuge project and a full-scale commercial gas centrifuge facility. Resources for licensing review of 1 full-scale gas centrifuge facility application are provided in FY 2004. Resources are also provided to continue the review of DOE's application for a MOX fuel fabrication facility to be located at DOE's Savannah River site. The NRC conducts licensing activities for 7 fuel cycle facilities and 10 special nuclear material and source material facilities (including greater-than-critical-mass facilities). Resources are also included for implementation of a safety and safeguards inspection program based on the risk-significance of licensee operations and facility performance history. Approximately 4 licensee performance reviews will be conducted per year. Resources are also provided for support of uranium recovery licensing activities.

FIGURE 1

Output Measure: Timeliness of fuel cycle licensing actions (amendments, renewals, new applications, and reviews). (For licensing actions received after October 1, 2000)*

	FY 2001	*FY 2002*	*FY 2003*	*FY 2004*
Target:	*75% ≤ 180 days* *100% ≤ 3 years*	*75% ≤ 180 days* *100% ≤ 2 years*	*75% ≤ 180 days* *100% ≤ 2 years*	*75% ≤ 180 days* *100% ≤ 2 years*
Actual:	*94% ≤ 180 days*	*88% ≤ 180 days* *100% ≤ 2 years*		

* Output modified in FY 2002 to exclude licensing actions involved in a hearing.

The NRC licenses and inspects all commercial nuclear fuel facilities involved in processing and fabricating uranium ore into reactor fuel as part of the agency's nuclear fuel cycle safety and safeguards mission. The agency conducts detailed health, safety, safeguards, and environmental licensing reviews and inspections of licensees' programs, procedures, operations, and facilities to ensure safe and secure operations. Accordingly, two output measures, timeliness of fuel cycle licensing actions

and timeliness of safety and safeguards inspections, have been selected to measure program effectiveness in governing the NRC's fuel facility licensing and inspection activities (Figures 1 and 2). The NRC continues to complete these activities on time.

FIGURE 2

Output Measure: Timeliness of safety and safeguards inspections.

*Target: Complete core inspections on time as scheduled in Fuel Cycle Master Inspection Plan**

	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Target:	*90%*	*90%*	*< 10% overdue*	*< 10% overdue*	*< 10% overdue*	*< 10% overdue*
Actual:	*98% (Completed 101 inspections)*	*100% (Completed 105 inspections)*	*< 1% overdue (Completed 144 inspections)*	*0% overdue (Completed 139 inspections)*		

*Output modified in FY 2001 to include the Region IV Uranium Recovery Inspection schedule and with less than 10% overdue.

Output modified in FY 2002 to replace the Fuel Cycle Master Inspection Plan with Temporary Instruction 2600/007.

Output modified in FY 2003 to replace Temporary Instruction 2600/007 with Inspection Manual Chapter 2600.

Change from FY 2003. Resources reflect salary and benefit increases as a result of the Governmentwide FY 2004 pay raise, as well as an increase in MOX fuel fabrication licensing and inspection activities. These increases are offset by decreases from progress made in completing major license amendments and integrated safety analysis summaries, efficiency improvements, and progress in GDP certification and enrichment licensing and inspection activities.

Nuclear Materials Users Licensing and Inspection

	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Budget Authority by Function ($K)				
Salaries and Benefits	20,347	19,728	18,954	-774
Contract Support and Travel	6,802	6,999	7,006	7
Total Budget Authority	**27,149**	**26,727**	**25,960**	**-767**
FTE	186	174	163	-11

FY 2004 Activities. Resources are provided to support licensing; inspection; and activities related to event evaluation, incident response, and allegations; maintain the regulatory infrastructure associated with possessing, processing, and handling nuclear materials; conduct business process improvements (BPIs); and centralize oversight of information technology and information management. Resources will fund approximately 1,100 routine health and safety inspections and closeout inspections. The NRC will also work closely with the Agreement States, which regulate approximately 16,500 licensees. In addition, the NRC will develop and complete up to 12 rulemaking actions, and conduct rulemaking and guidance development to implement a risk-informed, performance-based regulatory program for byproduct materials users. Resources support event evaluation activities for materials licensees, including maintenance of the Nuclear Materials Events Database (NMED), as well as maintenance, operation, and replacement of components of the NRC's nuclear materials users license tracking systems. Resources supporting BPI initiatives are expected to yield insight into the NRC's materials regulatory processes and make technical activities more effective and efficient.

The timeliness with which the NRC completes the licensing actions affiliated with nuclear materials users is one measure by which the NRC's effectiveness is evaluated. Licensing actions for licensees whose activities include medical diagnosis and therapy, medical and biological research, academic training and research,

FIGURE 3

Output Measure: Timeliness of review of applications for new materials licenses and license amendments.

	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Target:	80% ≤ 90 days	80% ≤ 90 days	80% ≤ 90 days 100% ≤ 1 year	85% ≤ 90 days 100% ≤ 1 year	85% ≤ 90 days 100% ≤ 1 year	85% ≤ 90 days 100% ≤ 1 year
Actual:	86% ≤ 90 days	95% ≤ 90 days (3,394 of 3,561)	94% ≤ 90 days (3,226 of 3,417) 99.7% ≤ 1 year	97% ≤ 90 days (3,210 of 3,301) 99.8% ≤ 1 year (3,294 of 3,301)		

industrial gauging and nondestructive testing, production of radiopharmaceuticals, and fabrication of such commercial products as smoke detectors and other sealed sources and devices, is measured by 1 of 2 timeliness output measures. Specifically, those measures include (1) timeliness of review of applications for new materials licenses and license amendments (Figure 3), and (2) timeliness of review of applications for materials license renewals and sealed source and device designs (Figure 4). These timeliness measures are designed to ascertain that the NRC completes the vast majority of licensing and inspection activities on a timely basis (Figure 5). Records indicate that the NRC does, in fact, continue to complete a vast majority of these activities on time.

FIGURE 4

Output Measure: Timeliness of review of applications for materials license renewals and sealed source and device designs.

	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Target:	*80% ≤ 180 days*	*80% ≤ 180 days*	*80% ≤ 180 days* *100% ≤ 2 years*	*85% ≤ 180 days* *100% ≤ 2 years*	*85% ≤ 180 days* *100% ≤ 2 years*	*85% ≤ 180 days* *100% ≤ 2 years*
Actual:	*66% ≤ 180 days**	*92% ≤ 180 days (192 of 208)*	*98% ≤ 180 days (731 of 748)* *100% ≤ 2 years (748 of 748)*	*96% ≤ 180 days (679 of 708)* *100% ≤ 2 years (708 of 708)*		

* Redirected focus to completion of cases over 180 days old, and successfully eliminated these old cases.

FIGURE 5

Output Measure: Timeliness of safety inspections of materials licensees.*

	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Target:	*< 10% overdue*	*< 10% overdue*	*< 10% overdue*	*< 10% overdue*	*< 10% overdue*	*< 10% overdue*
Actual:	*< 1% overdue*	*< 3% overdue (Completed approx. 1,000 core inspections)*	*1% overdue (Completed approx. 1,000 core inspections)*	*≤ 1% overdue (Completed approx. 650 core inspections)*		

* Core inspections as defined in Inspection Manual Chapter 2800.

FIGURE 6

Output Measure: The Nuclear Materials Events Database (NMED) which contains information about nuclear materials events reported to the NRC by licensees and Agreement States, will be maintained by entering materials event information in a timely manner.

Target: Materials event information from morning reports, event notifications, and preliminary notifications of occurrences will be entered into NMED and updated within the identified time frame.

	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Target:	*90% entered ≤ 2 working days* *90% updated ≤ 2 working weeks*	*90% entered ≤ 2 working days* *90% updated ≤ 2 working weeks*	*90% entered ≤ 2 working days* *90% updated ≤ 2 working weeks*	*90% entered ≤ 2 working days* *90% updated ≤ 2 working weeks*	*95% entered ≤ 2 working days* *90% updated ≤ 2 working weeks*	*95% entered ≤ 2 working days* *90% updated ≤ 2 working weeks*
Actual:	*> 90% ≥ 2 working days* *> 75% updated ≤ 2 working weeks**	*99% ≤ 2 working days (577 of 581)* *99% updated ≤ 2 working weeks (1,264 of 1,280)*	*99% ≤ 2 working days (496 of 501)* *99% updated ≤ 2 working weeks (741 of 987)*	*100% ≤ 2 working days (556 of 556)* *98% ≤ 2 working weeks (1,639 of 1,664)*		

* During the third quarter of FY 1999, the NRC met the target of 2 weeks 80 percent of the time.

The NRC continues to monitor materials safety issues through its event evaluation and incident response activities. The staff meets regularly to evaluate the possible safety significance of the events reported by licensees and Agreement States. The timely update of the NMED is one measure of the effectiveness of the NRC's nuclear materials event evaluation activities (Figure 6). The vast majority (95 percent) of nuclear materials events are to be entered into NMED within 2 working days. Records indicate that the NRC continues to perform this activity on a timely basis.

Change from FY 2003. Resources decrease because of efficiencies in the materials inspection program and rulemaking, and a reduced level of effort for licensing guidance. Resources also decrease to reflect 2 new Agreement States (Wisconsin and Minnesota), to which the NRC will transfer an estimated 375 licenses. These transfers will reduce the number of NRC license reviews for new applications, amendments, and sealed sources and device designs, as well as the number of materials inspections to be performed by the NRC.

Homeland Security

	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Budget Authority by Function ($K)				
Salaries and Benefits	2,311	2,919	4,585	1,666
Contract Support and Travel	4,162	3,486	13,076	9,590
Total Budget Authority	**6,473**	**6,405**	**17,661**	**11,256**
FTE	20	25	35	10

FY 2004 Activities. The NRC will perform vulnerability assessments of NRC-licensed fuel facilities and activities. As part of this effort, the NRC will examine the design-basis threat framework and the threat applicable to certain licensees to determine whether regulatory change is warranted. Other threat assessment activities include efforts to address contingency planning for unconventional threats to national security, as well as coordination with other Government agencies and local law enforcement authorities.

The NRC will develop a regulatory framework and related licensing and inspection improvements to further enhance the control of radioactive sources. This effort involves accountability of radioactive sources within the Nation's borders and the export of sources. The objectives are to prevent the potential use of radioactive sources in a radiological dispersal device (RDD) and to increase safety and security by reducing the number of incidents involving inadequate control of sources both domestically and internationally. In conjunction with this effort, the NRC will continue to participate in the Interagency Department of Homeland Security RDD Working Group. To record nuclear materials transactions, the NRC will also develop an information technology based tracking system. Resources are also planned to support development of a report on source control, participation in RDD exercises, and collaboration with other Federal entities on storage and disposal of sources.

Change from FY 2003. Resources increase primarily to improve regulatory control of radioactive sources.

Materials Safety Research

	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Budget Authority by Function ($K)				
Salaries and Benefits	620	770	919	149
Contract Support and Travel	790	1,015	815	-200
Total Budget Authority	**1,410**	**1,785**	**1,734**	**-51**
FTE	5	6	7	1

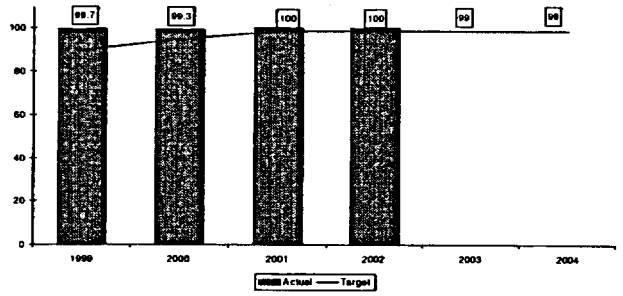
FY 2004 Activities. To ensure that NRC-regulated aspects of nuclear fuel cycle facilities and nuclear materials activities are handled in a manner that adequately protects public health and safety, the NRC will support research activities including development of probabilistic risk assessment tools and guidance necessary for making risk-informed regulatory decisions and for regulations associated with materials licensees. Special reports and NUREG/CR reports will document the results. The NRC will also examine data on adverse health effects caused by long-term exposure to low levels of radiation. In addition, the NRC research staff will provide technical support for the review of an application for a mixed-oxide fuel fabrication facility in the areas of instrumentation and controls, seismic hazards, tornado hazards, electrical design, and human factors.

Change from FY 2003. Overall, resources decrease in the Materials Safety Research program because of projected lower costs associated with implementing the work on examining data on adverse health effects of long-term exposure, and alignment of resources under the Reactor Safety Research program for the mixed-oxide fuel-related initiative to develop technical bases for higher enriched fuels for use in reactor analysis.

Additional Output Measures

The Materials Incident Response program (Figure 7) serves as a method for measuring the degree of the agency's responsiveness to an emergency situation.

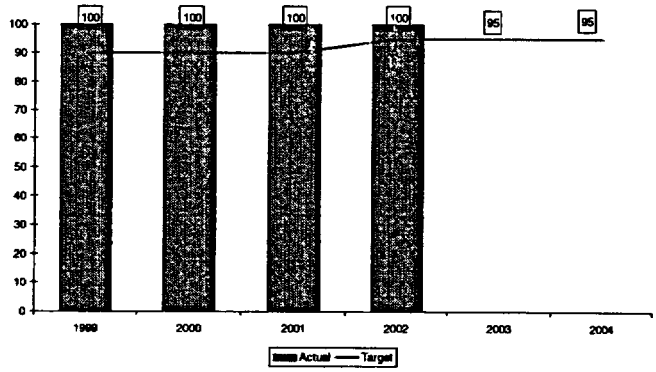
FIGURE 7
Output Measure: Emergency Response Performance Index (ERPI).
(Percent)



* Definition: Index provides the single overall measure of the degree to which the agency believes it is ready to respond to an emergency situation. It serves as a method for measuring disparate activities that comprise the elements of the Materials Incident Response program. It will be determined by averaging the degree to which each of the following program functions meets the goal of 99%: Response Organization Staffing, Response Facility Availability, Communications Reliability, Response Organization Training, and 24-Hour Notification Point. If the index falls below or approaches its target value of 99%, management will determine what is contributing most to the decline and conduct appropriate corrective measures based on this review.

The Materials Technical Training program (Figure 8) tracks the degree to which the numbers and types of materials technical training courses offered match the cumulative technical training needs within the Nuclear Materials Safety arena.

FIGURE 8
Output Measure: Number and types of materials technical training courses offered.
Target: Number and types of courses offered will meet cumulative needs identified by offices and regions in semiannual needs surveys.



The Materials Enforcement Actions program (Figure 9) reflects implementation and oversight of the Materials Enforcement program.

FIGURE 9

Output Measure: Timeliness in completing enforcement actions.

	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Target:	90% ≤ 90 days (average) 100% ≤ 120 days (average)	90% ≤ 90 days (average)	90% ≤ 90 days (average)	Investigation 100% ≤ 360 days Non-Investigation 100% ≤ 180 days	Investigation 100% ≤ 360 days Non-Investigation 100% ≤ 180 days	Investigation 100% ≤ 360 days Non-Investigation 100% ≤ 180 days
Actual:	90% in 75.2 days (average) 100% in 90.6 days (average)	90% in 53.2 days (average) 35 cases	90% in 55 days (average) 51 cases	Investigation 100% ≤ 360 days (21 cases) Non-Investigation 100% ≤ 180 days (40 cases)		

*Output modified in FY 2002 to distinguish between Investigation cases and Non-Investigation cases.

The Materials Investigation program measures timeliness in completing investigations related to materials-related wrongdoing (Figures 10 and 11).

FIGURE 10

Output Measure: Percentage of Office of Investigation cases will be investigated to a conclusion on the merits as either substantiated or unsubstantiated.

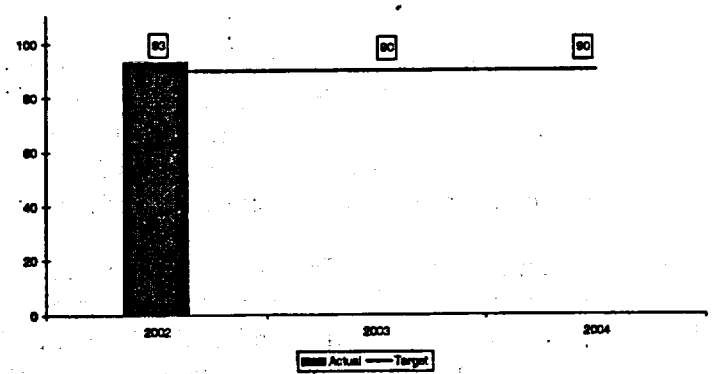


FIGURE 11

*Output Measure: Percentage of cases closed on the merits as either substantiated or unsubstantiated will be completed in 10 months or less.**

	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Target:	Complete cases ≤ 9 months (average) Active inventory ≤ 9%	Complete cases ≤ 9 months (average) Active inventory ≤ 9%	Complete cases ≤ 9 months (average) Active inventory ≤ 9%	Complete cases 80% ≤ 10 months	Complete cases 80% ≤ 10 months	Complete cases 80% ≤ 10 months
Actual:	Completed in 6.3 months (average) 8.4% open for > 12 months	Completed in 5.6 months (average) (73 cases) 6% open for > 12 months	Completed in 5 months (average) (79 cases)	87% of cases completed ≤ 10 months		

*Output modified in FY 2002 from "timeliness in completing investigations (average time to complete cases)."

ARENA NOTES

1. In addition to the 32 current Agreement States, Wisconsin and Minnesota are expected to become Agreement States by 2004.

2. For fuel cycle activities, this extends to other hazardous materials used with, or produced from, licensed material, consistent with proposed amendments to 10 CFR Part 70. It also includes exposures from uranium recovery activities under the Uranium Mill Tailing Radiation Control Act.

3. In this context, the regulatory framework consists of several interrelated aspects, including (1) the NRC's mandate from Congress in the form of enabling legislation, (2) the NRC's rules in Title 10 of the *Code of Federal Regulations*, (3) the regulatory guides and review plans that amplify those regulations, (4) the body of technical information obtained from research performed by the NRC or by others, and from evaluation of operational experience, that supports the positions in the rules and guides and review plans, (5) the licensing and inspection procedures utilized by the staff, and (6) the enforcement guidance.

4. "Risk-informed, performance-based regulation" is an approach in which risk insights, engineering analysis and judgment, and performance history are used to (1) focus attention on the most important activities, (2) establish objective criteria based upon risk insights for evaluating performance, (3) develop measurable or calculable parameters for monitoring system and licensee performance, and (4) focus on the results as the primary basis of regulatory decisionmaking.

5. "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 exposures (as defined by the Occupational Safety and Health Administration) have the potential to occur primarily with fuel cycle and uranium recovery activities in the Nuclear Materials Safety arena.

6. The metric was not in place in FY 1999. The metric was developed for FY 2000. Data were collected retrospectively for FY 1999 based upon data available at that time, to provide a context for future comparisons. Metrics can fluctuate over time based on additional reports from Agreement States and subsequent analyses of the events by consultants, licensees, States, and/or the NRC, based on definitions in this footnote.

7. In accordance with Appendix G to 10 CFR Part 73 and 10 CFR 74.11(a).

8. 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].

9. In accordance with the requirements of 10 CFR 95.57.

10. The performance goals and associated measures may be added to and/or modified as annual, real data are evaluated.

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

12. 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 contains the list of these events as reported by NRC licensees and, through the Agreement States, the Agreement State licensees.

13. The metric was not in place in FY 1999. The metric was developed for FY 2000. Data were collected retrospectively for FY 1999 based upon data available at that time, to provide a context for future comparisons. Metrics can fluctuate over time based on additional reports from Agreement States and subsequent analyses of the events by consultants, licensees, States, and/or NRC, based on definitions in this footnote. Actual data have changed as reported in FY 2003 Performance Plan based on additional data submitted late by Agreement States and licensees.

14. Actual data have changed as reported in FY 2003 Performance Plan based on additional data submitted late by Agreement States and licensees.

15. The FY 2001 figure of 298 losses, as reported in the FY 2003 Performance Plan, included events not reportable in accordance with NRC regulatory requirements. The correct and more current figure for FY 2001 is 244.

16. "Overexposures" are those exposures that exceed the dose limits specified in by 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.

17. The metric was not in place in FY 1999. The metric was developed for FY 2000. Data were collected retrospectively for FY 1999 based upon data available at that time, to provide a context for future comparisons. Metrics can fluctuate over time based on additional reports from Agreement States and subsequent analyses of the events by consultants, licensees, States, and/or NRC, based on definitions in this footnote.

18. Actual data have changed as reported in the FY 2003 Performance Plan based on additional data submitted late by Agreement States and licensees.

19. Medical events (misadministrations) as reported under 10 CFR Part 35 as tracked in NMED. Multiple patients may be affected by a single causal event.

20. The metric was not in place in FY 1999. The metric was developed for FY 2000. Data were collected retrospectively for FY 1999 based upon data available at that time, to provide a context for future comparisons. Metrics can fluctuate over time based on additional reports from Agreement States and subsequent analyses of the events by consultants, licensees, States, and/or NRC, based on definitions in this footnote.

21. Releases that have a 30-day reporting requirement under 10 CFR 20.2203(a)(3). This measure also includes chemical releases from regulated activity under the Uranium Mill Tailings Radiation Control Act.

22. "Malevolent use" is defined as the deliberate misuse of radioactive materials with the intent to cause physical or psychological harm to a person or persons, or to cause physical damage to a facility or to the environment. The NRC evaluates intentional violations and deliberate acts against this definition.

23. The metric was not in place in FY 1999. The metric was developed for FY 2000. Data were collected retrospectively for FY 1999 based upon data available at that time, to provide a context for future comparisons. Metrics can fluctuate over time based on additional reports from Agreement States and subsequent analyses of the events by consultants, licensees, States, and/or NRC, based on definitions in this footnote. Actual data have changed as reported in FY 2003 Performance Plan based on additional data submitted late by Agreement States and licensees.

24. This involves chemical releases from NRC-regulated activities under the Uranium Mill Tailings Radiation Control Act.

25. The NRC recognizes that no explicit reporting requirements exist for substantiated breakdowns of programs. The NRC relies on its safeguards inspection findings and licensee notifications.

26. All public outreaches were conducted as scheduled in the annual performance plan, with the exception of the public meeting on the Fuel Cycle Oversight Revision Process, which was canceled due to the delayed revision of this program to allow for development of risk information to support the proposed changes.

27. 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 been granted and identifies the actions that NRC staff has taken or will take to grant the petition in whole or in part. Similarly, if the petition is denied, the Director's Decision explains the bases for the denial and discusses all matters raised by the petitioner in support of the request.

28. The start of the 120-day period is the date that the Petition Review Board 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 issuance of a new acknowledgment letter.

29. Key processes planned for FY 2002 included (1) conducting business process improvement reviews of (1) licensing activities conducted at headquarters and in the regional offices, and (2) contract financial management activities.

30. Key processes planned for FY 2003 include (1) conducting business process improvement reviews of inspection activities conducted at headquarters and in the regional offices, and (2) workload planning and workflow processes.

31. The NRC completed 4 process improvement reviews in FY 2001, including (1) the Nuclear Materials Phase I review of the circumstances surrounding the overexposures at the Mallinckrodt facilities, (2) the Nuclear Materials Phase II review of the nuclear byproduct materials program, (3) the rulemaking efficiency process review, and (4) the self-assessment of the sealed source and device program prior to the Integrated Materials Performance Evaluation Program (IMPEP) review.

32. The NRC completed 2 process improvement reviews in FY 2002, including (1) implemented recommendations from the Materials Program Phase II Review of the Nuclear Byproduct Materials Program, and (2) implemented program recommendations from the Integrated Materials Performance Evaluation of the Sealed Source and Device Program. Also, in FY 2002, the NRC began planning for a Business Process Improvement (BPI) initiative. The goals of this initiative is to achieve efficiencies in the NRC's Office of Nuclear Material Safety and Safeguards (NMSS), in both the Nuclear Materials Safety and Nuclear Waste Safety arenas.

33. The NRC completed work on the 10 CFR Part 35 rule in FY 2001, and received conditional approval from the Office of Management and Budget (OMB) for clearance of information collection requirements on September 18, 2001. However, Public Law No. 107-66 (H.R. 2311) included a prohibition on spending by NRC to implement or enforce the revised Part 35, with respect to diagnostic nuclear medicine, until the Commission reexamined Part 35 and provided a report to Congress to explain why the burden imposed by the revised Part 35 could not be further reduced. The Commission submitted the report to Congress on January 31, 2002, and promulgated the rule in FY 2002.

34. In FY 2001, the staff's focus on reducing paperwork and recordkeeping imposed by the NRC centered on the revision to 10 CFR Part 35, which the staff estimates will result in a 12-percent reduction compared to the current requirements, when it is made effective. Implementation of Part 35 was pending during FY 2001 while awaiting Congressional decision, but proceeded in FY 2002. As the new requirements for Part 35 go into effect during FY 2003, the anticipated effect of reducing

unnecessary burden should begin to occur. However, it should be noted 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 10 CFR Part 70 (Special Nuclear Material) created a modest increase in paperwork requirements.