1 EXECUTIVE SUMMARY

2 APPROPRIATIONS LEGISLATION

3 NUCLEAR REACTOR SAFETY

4 NUCLEAR MATERIALS AND WASTE SAFETY

5 PERFORMANCE MEASUREMENT

6 INSPECTOR GENERAL

7 APPENDICES

NUREG-1100, Vol. 23 PERFORMANCE BUDGET FISCAL YEAR 2008 February 2007

NUREG-1100
VOLUME-23

U.S.NRC
UNITED STATES NUCLEAR REGULATORY COMMISSION
*Protecting People and the Environment*

# PERFORMANCE BUDGET
# FISCAL YEAR 2008

February 2007

## AVAILABILITY OF REFERENCE MATERIALS IN NRC PUBLICATIONS

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As of November 1999, you may electronically access NUREG-series publications and other NRC records at NRC's Public Electronic Reading Room at http://www.nrc.gov/reading-rm.html.
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1. The Superintendent of Documents
   U.S. Government Printing Office
   Mail Stop SSOP
   Washington, DC 20402–0001
   Internet: bookstore.gpo.gov
   Telephone: 202-512-1800
   Fax: 202-512-2250
2. The National Technical Information Service
   Springfield, VA 22161–0002
   www.ntis.gov
   1–800–553–6847 or, locally, 703–605–6000

A single copy of each NRC draft report for comment is available free, to the extent of supply, upon written request as follows:

Address: Office of Administration,
Printing and Mail Services Branch
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

E-mail: DISTRIBUTION@nrc.gov
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The NRC Technical Library
Two White Flint North
11545 Rockville Pike
Rockville, MD 20852–2738

These standards are available in the library for reference use by the public. Codes and standards are usually copyrighted and may be purchased from the originating organization or, if they are American National Standards, from—

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11 West 42nd Street
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U.S.NRC
UNITED STATES NUCLEAR REGULATORY COMMISSION
*Protecting People and the Environment*

# PERFORMANCE BUDGET

# FISCAL YEAR 2008

February 2007

## TABLE OF CONTENTS

**TABLE OF CONTENTS**

**TABLE OF CONTENTS (continued)**

**TABLE OF CONTENTS (continued)**

**TABLE OF CONTENTS (continued)**

## EXECUTIVE SUMMARY

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

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

### Overview of the NRC Performance Budget

The U.S. Nuclear Regulatory Commission (NRC) fiscal year (FY) 2008 Performance Budget provides the resources necessary to carry out the agency's mission. The NRC's proposed FY 2008 budget is $916.6 million. At this time, there is no enacted FY 2007 budget for the NRC and the NRC is operating under a continuing resolution (CR). Depending on the final FY 2007 appropriation for NRC, the FY 2007 targets for NRC performance measures are subject to change.

The following table gives the NRC's budget authority by appropriation:

**TOTAL NRC BUDGET AUTHORITY BY APPROPRIATION**
**(Dollars in Thousands)**

| NRC Appropriation | FY 2006 Enacted | FY 2007 President's Budget | FY 2007 CR* | FY 2008 Request |
|---|---|---|---|---|
| **Salaries and Expenses (S&E)** | | | | |
| Budget Authority | 733,204 | 768,410 | 714,778 | 908,409 |
| Offsetting Fees | 617,182 | 620,328 | 575,237 | 757,720 |
| Net Appropriated—S&E | 116,022 | 148,082 | 139,541 | 150,689 |
| **Office of the Inspector General (OIG)** | | | | |
| Budget Authority | 8,308 | 8,144 | 8,144 | 8,144 |
| Offsetting Fees | 7,485 | 7,330 | 7,330 | 7,330 |
| Net Appropriated—OIG | 823 | 814 | 814 | 814 |
| **Total NRC ($K)** | | | | |
| Budget Authority | 741,512 | 776,554 | 722,922 | 916,553 |
| Offsetting Fees | 624,667 | 627,658 | 582,566 | 765,050 |
| **Total Net Appropriated** | 116,845 | 148,896 | 140,356 | 151,503 |

*FY 2007 appropriations for the NRC had not been enacted at the time the budget was prepared; therefore, the NRC is operating under a continuing resolution (P.L. 109-289, Division B, as amended). The amounts included in the FY 2007 CR column reflect the year long effect of the current continuing resolution.

## EXECUTIVE SUMMARY

The FY 2008 budget reflects $765 million from fees assessed to NRC licensees, resulting in a net appropriation of $151.5 million. In accordance with the requirement defined in Section 220(b) of Office of Management and Budget Circular A-11, "Preparation, Submission and Execution of the Budget," the NRC is providing the full cost of its programs. The full cost includes an allocation of the agency's infrastructure and support costs to specific programs.

The FY 2008 budget continues to ensure the safe operation of existing facilities and responds to the revitalization of nuclear energy in the United States. This year, the budget increases to $917 million, or 18 percent ($140 million) above the FY 2007 President's Budget. In response to the Energy Policy Act of 2005, the nuclear industry now plans to submit new reactor license applications to the NRC. In recognition of this growth in the licensing workload, prior NRC budgets have included increased funding to prepare for the timely review of these applications. The increases this year are primarily in the Nuclear Reactor Safety Program, specifically in the office of the NRC that oversees new reactor licensing. These funds will support the review of the 12 of 17 combined construction and operating license (COL) applications expected to arrive at the NRC in FY 2008, two standard reactor design certification applications, three early reactor site permit applications, and the development of the reactor construction inspection program. Resources also increase to support Federal pay raises and other nondiscretionary compensation and benefit increases, as well as infrastructure and support cost increases to expand the agency's infrastructure to support additional personnel, replace obsolete equipment and software, meet new external requirements, and keep pace with inflation. These increases are offset by decreases in the Nuclear Materials and Waste Safety Program, primarily in the Nuclear Materials Users and High-Level Waste Repository programs.

## Summary by Major Programs

The FY 2008 Performance Budget is organized into two major programs: Nuclear Reactor Safety and Nuclear Materials and Waste Safety and the resources are shown in the following table.

**SUMMARY OF BUDGET AUTHORITY BY MAJOR PROGRAMS**
**(Dollars in Thousands)**

| | FY 2006 Enacted | | FY 2007 President's Budget* | | FY 2007 CR** | | FY 2008 Request | |
|---|---|---|---|---|---|---|---|---|
| **Summary** | **$** | **FTE** | **$** | **FTE** | **$** | **FTE** | **$** | **FTE** |
| **Budget Authority by Major Programs** | | | | | | | | |
| Subtotal Nuclear Reactor Safety | 514,647 | 2,311 | 561,334 | 2,375 | 518,877 | 2,375 | 709,003 | 2,646 |
| Subtotal Nuclear Materials and Waste Safety*** | 218,557 | 911 | 207,076 | 861 | 195,901 | 861 | 199,406 | 818 |
| **Subtotal** | 733,204 | 3,222 | 768,410 | 3,236 | 714,778 | 3,236 | 908,409 | 3,464 |
| Inspector General | 8,308 | 49 | 8,144 | 49 | 8,144 | 49 | 8,144 | 51 |
| **Total** | **741,512** | **3,271** | **776,554** | **3,285** | **722,922** | **3,285** | **916,553** | **3,515** |
| Reimbursable FTE | | 17 | | 20 | | 20 | | 20 |
| **Total**** | **741,512** | **3,288** | **776,554** | **3,305** | **722,922** | **3,305** | **916,553** | **3,535** |

*Includes some adjustments between programs.
**FY 2007 appropriations for the NRC had not been enacted at the time the budget was prepared; therefore, the NRC is operating under a continuing resolution (P.L. 109-289, Division B, as amended). The amounts included in the FY 2007 CR column reflect the year long effect of the current continuing resolution.
***The NRC plans to use approximately $6 million, including 19 FTEs, in FY 2007 and $19.7 million, including 39 FTEs, in FY 2008 from its prior-year Nuclear Waste Fund appropriations to fund its High-Level Waste Repository program
****The FTE estimate is subject to revision based on workload demands as outlined above.

Highlights of major FY 2008 activities for each of the NRC's programs follow. Chapters 3 and 4 provide additional details, including output measures and FY 2006 accomplishments. Chapter 5 describes the NRC's performance measures. Chapter 6 gives the budget for the Office of the Inspector General. Homeland security resources are included within the programs they support, and Appendix II provides a crosscut. Appendix III explains the agency's infrastructure and support activities and the allocation of those resources to programs.

### *Nuclear Reactor Safety Program*

#### ***New Reactors***

The NRC FY 2008 budget includes $216.9 million for new reactor activities associated with renewed interest in building nuclear power reactors. Specifically, the NRC will conduct pre-licensing and licensing reviews consistent with projected industry schedules. Currently, the nuclear industry is projecting to submit at least 20 COL applications to the NRC for at least 29 new nuclear power reactors. The first 17 of these COL applications are expected to arrive in FY 2008. In FY 2008, the NRC expects to begin conducting the safety, security, and environmental reviews for 12 of the 17 COL applications. Although the exact timing and number of license applications has some uncertainty, the NRC will manage its human capital resources in a way that provides flexibility to the organization to meet demand for services without overcommitting to hiring full-time employees. As noted in a recent GAO report, the NRC has been developing a human capital plan. The NRC will continue development and use of this plan to continually adjust the allocation of employees and staffing assignments to meet workload requirements. For example, as the degree of certainty for the number of applications increases, the agency may rely less on contractors and more on FTE to effectively deal with the applications within available funding. The budget also includes resources to support pre-application review activities for multiple COL applications and the development of the construction inspection program. The NRC will also conduct technical reviews and mandatory hearings associated with three early site permit applications, and will review two standard design certification applications. The NRC will continue to update the agency's regulatory infrastructure and conduct research activities to support its reviews of the COL applications and new reactor designs. Research will also focus on developing tools, data, and expertise applicable to a broader range of reactors, including those under consideration for the DOE's Next Generation Nuclear Plant (NGNP) Project. Finally, the NRC will provide security through safeguards and security reviews for multiple combined license applications, early site permit, and standard design certification applications.

#### ***Reactor Licensing and Rulemaking***

The NRC FY 2008 budget includes $245.7 million for reactor licensing activities associated with overseeing the existing licenses of 104 nuclear power reactors and 34 research and test reactors. During FY 2008, the NRC's activities to support existing licensees will include the review of approximately 1,465 licensing actions, such as conversion actions for the improved standard technical specifications, power uprates, license transfers, and quality assurance. In addition, the NRC expects to begin reviewing four new renewal applications and to complete the reviews of four applications. The FY 2008 budget also includes resources to develop and maintain the technical tools and expertise needed to support regulatory decisions involving operating reactors such as those governing power uprates, license renewals, analysis of aging and integrity of reactor systems, security assessment and mitigating strategies, radiation protection, effectiveness of inspections,

evaluation of operation experience, and event readiness. The NRC will also conduct activities that encompass international nuclear policy formulation, treaty implementation, nuclear proliferation deterrence, international safety and safeguards assistance, and cooperative nuclear safety research assistance. The NRC will continue to provide security through safeguards and security licensing reviews, threat assessments, regulatory improvements including guidance development and rulemakings, and coordination with the Department of Homeland Security, other Federal agencies, and State and local officials. The NRC will continue to support licensee emergency preparedness through licensee reviews, review and revisions of regulatory guidance, and communications and outreach with stakeholders.

***Reactor Oversight and Incident Response***

The NRC FY 2008 budget includes $246.4 million to ensure that operators of the 104 licensed reactors identify and resolve safety and security issues before the issues affect safe plant operation and that the NRC is prepared to respond to incidents or events that affect licensed facilities or operations. The NRC will continue to strengthen reactor oversight activities to provide early identification and management of potential safety issues. These activities will include risk-informed inspections, use of performance indicator data, and the reactor assessment process. The inspection process, primarily conducted by resident and region-based inspectors, has three major elements: baseline inspections, plant-specific supplemental and reactive inspections, and generic issue inspections that address areas of emerging concern or areas requiring increased emphasis because of recurring problems. The NRC will conduct more than 40 baseline inspection procedures at each of the 67 sites and will conduct approximately 25 supplemental inspections and 12 reactive inspections each year, and will continue its efforts to fully address safety culture in the Reactor Oversight Process. The NRC uses enforcement to deter noncompliance with agency requirements and to encourage prompt identification and correction of violations. The assessment process integrates inspection findings with other objective measures of performance (performance indicators), which licensees submit quarterly for each power reactor site. The NRC will continue to enhance and maintain reactor security through approximately 150 annual inspections, including an average of 21 force-on-force exercises, to confirm the adequacy of nuclear reactor security in the current threat environment. The NRC will continue to maintain a high state of incident response readiness and to communicate and partner with other Federal, State, and local agencies.

### *Nuclear Materials and Waste Safety Program*

#### *Fuel Facilities*

The NRC FY 2008 budget includes $34.3 million to conduct the NRC's regulatory programs at fuel cycle facilities and to support related research. The regulated facilities include 21 fuel cycle facilities (7 major and 10 minor fuel fabrication facilities, 2 gaseous diffusion enrichment facilities, and 2 gas centrifuge facilities). Additionally, the NRC will review an application for possession and use of licensed material at the mixed-oxide fuel fabrication facility and develop inspection procedures for this facility. Resources will support homeland security activities, specifically to conduct physical protection and material control and accounting (MC&A) reviews of the NRC-licensed fuel facilities; implement security enhancements; and support the baseline inspection program for physical protection, MC&A, and force-on-force exercises at Category I fuel facilities.

#### *Nuclear Materials Users*

The NRC FY 2008 budget includes $71.8 million to provide for licensing, inspection, event evaluation, incident response, allegation, and rulemaking activities to maintain the regulatory infrastructure needed for processing and handling nuclear materials. The agency expects to complete approximately 1,700 materials licensing actions and 1,500 routine health and safety inspections in FY 2008. Resources also support the NRC's responsibility under the Energy Policy Act of 2005 to regulate a broader definition of byproduct materials. The NRC will continue to work on approximately 15-20 active materials and waste rulemakings per year and will issue 5-8 proposed or final rules per year. The NRC will conduct oversight, technical assistance, regulatory development, and cooperative efforts with its 34 Agreement States. The NRC will conduct homeland security activities including license reviews and inspections; regulatory improvement activities including finalizing security rulemakings; and coordination with other Federal agencies and State and local officials. The agency will develop a national registry of radioactive sources of concern that will improve controls on risk-significant radioactive materials to prevent their malevolent use. The NRC will continue to maintain a high state of incident response readiness and to communicate and partner with other Federal, State, and local agencies.

#### *High-Level Waste Repository*

The NRC FY 2008 budget includes $37.3 million for high-level waste pre-licensing activities, including emergent issues and inspection activities addressing repository design confirmation, pre-closure safety, performance confirmation, and the effectiveness of the DOE quality assurance program. Additionally, the NRC will review designs for transport and aging (storage) casks for use with the DOE transport, aging, and disposal canister-based system. The DOE has stated that it expects to submit its high-level waste repository license application to the NRC in FY 2008. The NRC budget is based on this expected application date. The NRC plans to use approximately $6 million in FY 2007 and $19.7 million in FY 2008 from its prior-year Nuclear Waste Fund appropriations to fund this program.

***Decommissioning and Low-Level Waste***

The NRC FY 2008 budget includes $27.8 million to conduct decommissioning licensing and inspection activities at 14 power and 2 early demonstration reactors, 11 research and test reactors, and approximately 18 complex materials and fuel facility sites. In addition, the NRC will conduct decommissioning and licensing activities at 15 sites licensed by the NRC under Title II of the Uranium Mill Tailings Radiation Control Act (UMTRCA), 21 sites DOE is remediating under Title I of UMTRCA, and three source material sites in the uranium recovery activity. These activities include project management, technical reviews, emergency preparedness and radiation protection inspections at decommissioning reactors, material and uranium recovery sites, material and fuel facility decommissioning plan reviews, financial assurance reviews, and uranium recovery operations. Activities also include the review and approval of license applications for, and inspections at, uranium recovery facilities. Resources support the completion of decommissioning activities for four power reactors, including confirmatory site radiological surveys, and completion of decommissioning for three materials facilities. Resources also support NRC Low-Level Waste (LLW) oversight activities. The NRC's FY 2008 budget includes $2.0 million to provide oversight of certain DOE waste determination activities and plans consistent with the NRC's new responsibilities under the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005.

***Spent Fuel Storage and Transportation***

The NRC FY 2008 budget includes $28.2 million for the NRC to license, certify, and inspect the interim storage of spent fuel from commercial nuclear reactors and the domestic and international transportation of radioactive materials to ensure safety and meet industry needs. Resources also support research associated with these activities. The NRC expects to review new applications for independent spent fuel storage installations at commercial nuclear power plants, spent fuel storage casks, transportation packages, dual purpose (storage and transport) casks, and route approvals. Resources also support emergent technical issues such as credit for spent fuel burnup, storage and transport of high burnup fuel, and moderator exclusion, which take advantage of design features that prevent water from entering a spent fuel transportation package. The NRC will continue homeland security activities including license reviews, inspections, and regulatory improvements including guidance development and rulemakings.

**Financing the NRC's Budget**

The NRC FY 2008 budget is based on the provisions of the Energy Policy Act of 2005 and therefore provides for 90-percent fee recovery, less appropriations from the Nuclear Waste Fund, appropriations to implement section 3116 of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005, and generic homeland security costs, which are excluded from NRC's fee

recovery requirements. Thus, the NRC FY 2008 budget will be financed with $765.1 million from user fees, $114.3 million from the General Fund, and $37.3 million from the Nuclear Waste Fund.

**NRC FINANCING**
**(Dollars in Thousands)**

| | FY 2006 | FY 2007 President's Budget | FY 2007 CR** | FY 2008 |
|---|---|---|---|---|
| **Budget Authority** | 741,512 | 776,554 | 722,922 | 916,553 |
| **Offsetting Fees** | 624,667 | 627,658 | 582,566 | 765,050 |
| **Net Appropriated** | | | | |
| **Nuclear Waste Fund** | 45,657 | 40,982 | 40,982 | 37,250 |
| **General Fund (Off Fee Base)*** | 71,188 | 107,914 | 99,374 | 114,253 |
| **Total Net Appropriated** | 116,845 | 148,896 | 140,356 | 151,503 |

*For the FY 2007 President's Budget, this includes $35.308 million for generic homeland security and $2.867 million for WIR activities. For the FY 2007 CR, this includes $32.844 million for generic homeland security and $1.8 million for WIR activities. For FY 2008, this includes $27.248 million for generic homeland security and $2.0 million for WIR activities.

**FY 2007 appropriations for the NRC had not been enacted at the time the budget was prepared; therefore, the NRC is operating under a continuing resolution (P.L. 109-289, Division B, as amended). The amounts included in the FY 2007 CR column reflect the year long effect of the current continuing resolution.

## PROPOSED FISCAL YEAR 2008 APPROPRIATIONS LEGISLATION

The NRC's proposed appropriations legislation for FY 2008 is as follows:

***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 $19,000), $908,409,000, to remain available until expended: *Provided*, That of the amount appropriated herein, $37,250,000 shall be derived from the Nuclear Waste Fund: *Provided further*, That revenues from licensing fees, inspection services, and other services and collections estimated at $757,720,000 in fiscal year 2008 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 (FY) 2008 so as to result in a final fiscal year 2008 appropriation estimated at not more than $150,689,000.[1]

***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, $8,144,000, to remain available until September 30, 2009: *Provided*, That revenues from licensing. fees, inspection services, and other services and collections estimated at $7,330,000 in FY2008 shall be retained and be available until September 30, 2009, for necessary salaries and expenses in this account, notwithstanding 31 U.S.C. 3302: *Provided further*, That the sum herein appropriated shall be reduced by the amount of revenues received during FY 2008 so as to result in a final FY 2008 appropriation estimated at not more than $814,000.[1]

[1] A regular 2007 appropriation for this account had not been enacted at the time the budget was prepared; therefore, this account is operating under a continuing resolution (P.L. 109-289, Division B, as amended). The amounts included for 2007 in this budget reflect the levels provided by the continuing resolution.

## Analysis of Proposed FY 2008 Appropriations Legislation

The analysis of the NRC's proposed appropriations legislation for FY 2008 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 AEC 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 for such purpose. The Congress has appropriated funds for official representation expenses to the NRC and its predecessor, the AEC, each year since FY 1950.

3. 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.

4. 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 amount of fees paid into the Nuclear Waste Fund by generators or owners of such waste and spent fuel shall be reviewed annually to determine if any adjustments are needed to ensure full cost recovery.

42 U.S.C. 10134 specifically requires the NRC to consider an application for 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 for administrative costs of the high-level radioactive waste disposal program.

5. 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:

Title V of the Independent Offices Appropriation Act of 1952 authorizes the NRC 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 its 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. In accordance with amendments to 42 U.S.C. 2213, enacted in the Energy Policy Act of 2005, and this appropriations request, the aggregate annual amount of such charges approximate 90 percent of the Commission's budget authority, less any amount appropriated to the Commission from the Nuclear Waste Fund, funds appropriated to implement section 3116 of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005 (NDAA), and amounts appropriated to the Commission for generic homeland security activities.

Section 3116 of the NDAA, Public Law (P.L.) 108-375, assigns new responsibilities to the NRC for waste determinations and monitoring of waste disposal actions for material stored at DOE sites in South Carolina and Idaho. Section 3116(b)(4) requires that, beginning with the FY 2006 budget, the Commission include in its budget justification materials submitted to the Congress the amounts required, not offset by revenues, for performance of its responsibilities under Section 3116. The $2,000,000 requested to implement section 3116 is excluded from the NRC's fee recovery requirements.

Section 637 of the Energy Policy Act of 2005, P.L. 109-190, modifies the NRC's user fee legislation in 42 U.S.C. 2213 to exclude from license fee recovery the amounts appropriated to the Commission for generic homeland security activities, except reimbursable costs of fingerprinting and background checks and the costs of conducting security inspections. The $27,248,000 requested for generic homeland security activities is excluded from the NRC's fee recovery requirements.

The aggregate amount of license fees and annual charges to be collected for FY 2008 approximate 90 percent of the Commission's budget authority, less the requested amount from the Nuclear Waste Fund, the amount requested to implement section 3116 of the NDAA, and amounts requested for generic homeland security activities pursuant to section 637 of the Energy Policy Act of 2005.

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

6. 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 its 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. In accordance with amendments to 42 U.S.C. 2213, enacted in the Energy Policy Act of 2005, and this appropriations request, the aggregate annual amount of such charges approximate 90 percent of the Commission's budget authority, less any amount appropriated to the Commission from the Nuclear Waste Fund, funds appropriated to implement section 3116 of the NDAA, and amounts appropriated to the Commission for generic homeland security activities.

***Office of the Inspector General***

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

   P.L. 95-452, 5 U.S.C. app., as amended by P.L. 100-504

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

8. TO REMAIN AVAILABLE UNTIL SEPTEMBER 30, 2009:

   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.

9. 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:

   Title V of the Independent Offices Appropriation Act of 1952 authorizes the NRC 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 its 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. In accordance with amendments to 42 U.S.C. 2213, enacted in the Energy Policy Act of 2005, and this appropriations request, the aggregate annual amount of such charges approximate 90 percent of the Commission's budget authority, less any amount appropriated to the Commission from the Nuclear Waste Fund, funds appropriated to implement section 3116 of the NDAA, and amounts appropriated to the Commission for generic homeland security activities. 31 U.S.C. 3302 requires the NRC to deposit all revenues collected to miscellaneous receipts of the U.S. Treasury unless specifically authorized by law to retain and use such revenues.

10. 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 its 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. In accordance with amendments to 42 U.S.C. 2213, enacted in the Energy Policy Act of 2005, and this appropriations request, the aggregate annual amount of such charges approximate 90 percent of the Commission's budget authority, less any amount appropriated to the Commission from the Nuclear Waste Fund, funds appropriated to implement section 3116 of the NDAA, and amounts appropriated to the Commission for generic homeland security activities.

## NUCLEAR REACTOR SAFETY

The Nuclear Reactor Safety program encompasses all U.S. Nuclear Regulatory Commission (NRC) efforts to ensure that civilian nuclear power reactor facilities and research and test reactors (RTRs) are licensed and operated in a manner that adequately protects the environment and the health and safety of the public and ensures against radiological sabotage and theft or diversion of special nuclear materials. The Atomic Energy Act of 1954, as amended, and the Energy Reorganization Act of 1974, as amended, are the foundation for the NRC's regulation of the Nation's civilian nuclear power industry. These efforts include new reactor activities, reactor licensing (including power uprates, license transfers, operator licensing, regulation development, operating experience evaluation, and financial assurance), rulemaking, reactor license renewal, reactor oversight (including emergency preparedness and incident response, reactor technical and regulatory training, imposition of enforcement sanctions for violations of NRC requirements, and investigation of alleged wrongdoing by licensees, applicants, contractors, or vendors), reactor regulatory research, homeland security activities (including threat assessment, safeguards and security reviews and inspections, force-on-force exercises, regulatory infrastructure improvements, and coordination with the Department of Homeland Security (DHS), other Federal agencies, and State and local officials), and international initiatives to enhance domestic and global nuclear safety.

## BUDGET OVERVIEW

| Summary | FY 2006 Enacted | FY 2007 President's Budget | FY 2008 Request |
|---|---|---|---|
| **Budget Authority by Major Program ($K)** | | | |
| Program Salaries and Benefits | 253,325 | 260,989 | 298,472 |
| Program Contract Support and Travel | 111,337 | 129,730 | 199,867 |
| Subtotal Program | 364,662 | 390,719 | 498,339 |
| Infrastructure and Support Salaries and Benefits | 58,428 | 63,830 | 72,306 |
| Infrastructure and Support Contract Support and Travel | 91,557 | 106,785 | 138,358 |
| Subtotal Infrastructure and Support Allocation | 149,985 | 170,615 | 210,664 |
| **Total Budget Authority** | **514,647** | **561,334** | **709,003** |
| Program FTE | 1,864 | 1,908 | 2,130 |
| Infrastructure and Support FTE | 447 | 467 | 516 |
| **Total FTE** | **2,311** | **2,375** | **2,646** |

The budget request of $709 million for the Nuclear Reactor Safety program supports the regulatory oversight of 104 civilian nuclear power reactors that are currently licensed to operate. Furthermore,

due to continuing industry interest and national policy initiatives such as the Department of Energy (DOE) Nuclear Power 2010 program and the Energy Policy Act of 2005, the agency will need to expend a significant level of effort to support new reactor activities in FY 2008 and beyond. In FY 2008, resources increase primarily to support new reactor activities and higher infrastructure and support costs.

## BUDGET AUTHORITY AND FULL-TIME EQUIVALENTS BY PROGRAM

| Summary | FY 2006 Enacted | FY 2007 President's Budget | FY 2008 Request |
|---|---|---|---|
| **Budget Authority by Program ($K)** | | | |
| New Reactors | 51,026 | 92,649 | 216,931 |
| Reactor Licensing and Rulemaking | 252,782 | 242,395 | 245,713 |
| Reactor Oversight and Incident Response | 210,839 | 226,290 | 246,359 |
| **Total Budget Authority** | **514,647** | **561,334** | **709,003** |
| **FTE by Program** | | | |
| New Reactors | 199 | 304 | 587 |
| Reactor Licensing and Rulemaking | 1,044 | 966 | 949 |
| Reactor Oversight and Incident Response | 1,068 | 1,105 | 1,110 |
| **Total FTE** | **2,311** | **2,375** | **2,646** |

## Justification of Program Requests

The following pages discuss the Nuclear Reactor Safety program.

## NEW REACTORS

| Summary | FY 2006 Enacted | FY 2007 President's Budget | FY 2008 Request |
|---|---|---|---|
| **Budget Authority by Program ($K)** | | | |
| Program Resources | 37,470 | 70,491 | 175,545 |
| Infrastructure and Support | 13,556 | 22,158 | 41,386 |
| **Total Budget Authority** | **51,026** | **92,649** | **216,931** |
| Program FTE | 156 | 242 | 476 |
| Infrastructure and Support FTE | 43 | 62 | 111 |
| **Total FTE** | **199** | **304** | **587** |

*FY 2008 Activities. (1) Safety*: In response to renewed interest in building nuclear power reactors, the NRC will conduct pre-licensing and licensing reviews in a manner that is consistent with projected industry plans and schedules. Currently, the nuclear industry is projecting to submit at least 20 COL applications to the NRC for at least 29 new nuclear power reactors, 17 of these combined license applications are expected to arrive during FY 2008. In FY 2008, the NRC expects to begin reviewing 12 of these COL applications and conducting associated environmental reviews. Further, the NRC will conduct technical reviews and mandatory hearings associated with three early site permit applications and will review two standard design certification applications. The NRC will continue to update the agency's regulatory infrastructure to support the reviews of multiple COL applications and new reactor designs. These efforts will include the update of regulatory guidance, the construction inspection program development, review and revision of industry COL application guidance, and the Multinational Design Evaluation Program development. Research will focus on design-specific technical tools, data, and expertise such as computer code development and modeling needed to support design certification and pre-application reviews. Research will also focus on developing tools, data, and expertise applicable to a broader range of reactors, including those under consideration for the DOE's Next Generation Nuclear Plant (NGNP) Project.

*(2) Security:* The NRC will provide security through safeguards and security licensing reviews for multiple COL license applications, two standard design certification applications, three early site permit applications, and through refinements to the regulatory infrastructure. Regulatory infrastructure includes procedures enhancements, review and development of licensing review guidance, and technical and coordination support related to rulemaking for new reactors.

*Program Assessment Rating Tool (PART).* Because it is new, the New Reactors program has not yet undergone a PART review. The scheduling of this program for PART review will be addressed during the FY 2009 budget process.

*Strategic Outcomes and Performance Measures.* The New Reactors program activities support a number of the agency's strategic outcomes and performance measures, which Chapter 5 of this document describes in detail. Specifically, reactor inspection activities support Safety goal strategic outcomes 1.1, 1.3, 1.4, and 1.5 and performance measures 1, 2, 3, 4, 5, and 6; Security goal strategic outcome 2.1 and performance measures 1, 2, 3, 4, and 5; Openness goal strategic outcome 3.1 and performance measures 1 and 2; and Effectiveness goal strategic outcome 4.1 and performance measures 1, 2, and 3.

*Output Measures.* The requested resources will support agency efforts to achieve the output targets set forth in the following tables. The tables provide historical performance data, if available, on the FY 2003 - FY 2006 measures. In addition, a description of the program's most significant accomplishments in FY 2006 follows these tables.

| Output measure: Review early site permit applications on the schedules negotiated with the applicants. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | Begin review of 2 applications. | Begin review of 1 application. Issue requests for additional information (RAIs) for 1 application. | Issue draft safety evaluation report (SER) and draft environmental impact statement (EIS) for 3 applications. Issue final safety evaluation report (SER) for 1 application. | Issue final SER for 2 applications and final EIS for 3 applications. Begin review of the Vogtle ESP application. | Complete milestones for Vogtle ESP application.<br><br>Begin review of 1 ESP application. | Complete 1 ESP review.<br><br>Continue review of 2 existing ESP applications. |
| Actual: | Began review of 2 applications. | Began review of 1 application. Issued RAIs for 3 applications. | Issued draft SER and EIS for 3 applications, and final SER for 1 application. | Issued 2 FSER and issued 2 final EIS (Note: North Anna delayed as result of applicant design change). Started review of Vogtle ESP. | | |
| This measure supports performance measure 2 and 3 of the Effectiveness Goal, while maintaining Safety and Security. | | | | | | |

| Output measure: Review design certification applications on the schedules negotiated with the applicants. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | Issue draft SER for AP1000. | Issue the final SER for AP1000 design certification review. | Complete milestones necessary to complete AP1000 design certification rulemaking in FY 2006. Begin review of ESBWR design certification application. | Complete milestones necessary to complete ESBWR design certification. | Complete milestones necessary to complete ESBWR design certification. Issue the draft SER for ESBWR. | Complete milestones necessary to complete ESBWR design certification. Issue the draft SER for ESBWR. Begin review of EPR design certification application review. |
| Actual: | Issued draft SER for AP1000. | Issued FSER and Final Design Approval (FDA) for AP1000. | Completed milestones necessary to complete AP1000 design certification rulemaking in FY 2006. Began ESBWR design certification application review. | Completed milestones necessary to complete ESBWR design certification. | | |
| This measure supports performance measures 2 and 3 of the Effectiveness Goal, while maintaining Safety and Security. | | | | | | |

| Output measure: Review combined license (COL) applications on the schedules negotiated with the applicants. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | New Measure in FY 2006. | | | Begin pre-COL application interactions with prospective COL applicants. | Continue pre-COL application interactions with prospective COL applicants. | Complete milestones associated with conducting 12 COL application reviews. |
| Actual: | | | | Staff has engaged in pre-application activities with potential COL applicants. | | |
| This measure supports performance measure 2 and 3 of the Effectiveness Goal, while maintaining Safety and Security. | | | | | | |

### *FY 2006 Significant Accomplishments*

The NRC has been actively reviewing new nuclear reactor designs to ensure that applications can be evaluated thoroughly and in a timely manner upon receipt. The agency approved a fourth power plant design, the Westinghouse AP1000 standard plant design. In addition, General Electric Company has submitted a design certification application for the Economic Simplified Boiling-Water Reactor (ESBWR) design, which was sufficiently complete to be formally accepted as a

docketed application for design certification. The agency will continue with preparations to review new reactor license applications that are projected to be submitted during FY 2008 through FY 2009.

The NRC held a public meeting to discuss the North Anna early site permit supplemental submission, which contains changes to the cooling system design. All three plant applications (Clinton, North Anna, and Grand Gulf nuclear power plant sites) require an environmental impact statement (EIS). The agency issued the final Grand Gulf and Clinton EISs in FY 2006. These early site permits address site safety, environmental protection, and plans for coping with emergencies independent of the review of a specific nuclear plant design. The agency received and is currently reviewing the Vogtle early site permit application.

The agency approved moving forward with the Multinational Design Evaluation Report (MDEP). As part of stage 1 of the MDEP, the NRC and regulators from Finland and France signed bilateral administrative memoranda of exchange, expressing their intentions to cooperate on the review of the Evolutionary Power Reactor (EPR) design in accordance with already established bilateral agreements. As part of stage 2 of the MDEP, the agency worked with the Organization for Economic Cooperation and Development Nuclear Energy Agency (NEA) and nine countries to develop and sign terms of reference, which will serve as the project charter. In October 2006, the MDEP members began to work toward the international convergence of the regulations, codes, and standards associated with new reactor design and licensing.

Working jointly with DOE the agency, has begun to develop the licensing strategy for the NGNP Project.

The agency completed independent plant-specific assessments at all operating power reactors to identify strategies to mitigate the effects of terrorist or other beyond-design-basis events. The agency proposed revisions to the regulation governing early site permits, design certifications, and COLs to improve the effectiveness and efficiency of the licensing processes for future applicants.

The NRC staff began to work with DHS to develop roles and responsibilities in relation to new reactor licensing activities and the authority granted to DHS by the Energy Policy Act of 2005. Estimates of required resources were developed and shared for emergency preparedness reviews (conducted by the Federal Emergency Management Agency (FEMA)) and for DHS consultation on potential location vulnerabilities.

## REACTOR LICENSING AND RULEMAKING

| Summary | FY 2006 Enacted | FY 2007 President's Budget | FY 2008 Request |
|---|---|---|---|
| **Budget Authority by Program ($K)** | | | |
| Program Resources | 184,847 | 170,947 | 170,518 |
| Infrastructure and Support | 67,935 | 71,448 | 75,195 |
| **Total Budget Authority** | **252,782** | **242,395** | **245,713** |
| Program FTE | 853 | 769 | 764 |
| Infrastructure and Support FTE | 191 | 197 | 185 |
| **Total FTE** | **1,044** | **966** | **949** |

*FY 2008 Activities. (1) Safety:* The NRC is responsible for overseeing the licenses of 104 nuclear power reactors and 34 RTRs. The NRC is also responsible for developing regulations for the safe operation of nuclear facilities and ensuring adequate protection of workers, the public, and the environment.

In FY 2008, the agency will complete 1,465 licensing actions to amend existing licenses (including approximately 10 requests to increase the power generating capacity of specific reactors) and 500 other licensing tasks to address issues that do not require a license amendment. The activities include legal advice and representation for these reactor licensing actions. The NRC will screen and evaluate approximately 3,000 reports on events at power reactors in FY 2008. The agency will work on approximately 12 active rulemakings and issue three proposed rules and three final rules per year for the safe operation of reactors, including rules to increase the effectiveness of regulations and move the agency towards more risk-informed and/or performance-based regulation. The NRC will continue emergency preparedness support of licensee reviews and actions for operating power plants, including review and revision of regulatory guidance and communications and outreach with stakeholders. To ensure continued safety, the NRC will oversee the operation of 34 RTRs and approximately 300 associated reactor operators.

The NRC conducts reactor safety research to ensure that licensees safely design, construct, and operate civilian nuclear reactor facilities. The NRC will work on research activities to support risk-informing the agency's regulations, technical standards, and oversight practices. The NRC will develop experimental data to assess computer codes used in the safety analyses of reactor facilities. The NRC will also continue to conduct a systematic assessment of potential generic issues and address their resolution through the Generic Issues Program. The NRC's research will focus more on aging of reactor materials, use of digital systems in power reactors, fire risk assessment, and

increased support of the agency's Reactor Oversight Program (ROP). The staff will undertake an updated analysis of the consequences of nuclear power severe accidents to provide the basis for technical and policy decisions related to risk-informed regulation, emergency planning, and spent fuel storage.

As part of its responsibility to oversee the licenses of the 104 civilian nuclear power reactors, the NRC reviews license renewal applications to determine whether a reactor can continue to operate safely beyond its original 40-year operating life for up to an additional 20 years. The resource estimates are based on the number and timing of the applications and a 22-month cycle (30 months if there is a hearing) for completing each of the reviews. Nonstandard license renewal applications are completed according to the schedule agreed upon with the applicant. In FY 2008, the NRC expects to begin reviewing four new renewal applications and to complete the reviews of four applications. The staff will review the licensees' applications and supporting documentation, conduct independent evaluations of the safety and environmental issues associated with extended reactor operation, and conduct inspections to verify application information and the licensees' activities for managing reactor aging.

The NRC will also conduct activities that encompass international nuclear policy formulation, treaty implementation, nuclear proliferation deterrence, international safety and safeguards assistance, and cooperative nuclear safety research assistance. The activities include participation in a wide range of mutually beneficial international information exchange programs and meetings to develop international nuclear regulatory policy and approaches for the safe and secure use of nuclear material for peaceful purposes. The NRC will also participate in activities to enhance domestic and foreign nuclear safety through its bilateral programs and multilateral organizations such as the International Atomic Energy Agency (IAEA) and NEA. The NRC will support new initiatives for nuclear safety cooperation with foreign governments such as Azerbaijan and Iraq.

*(2) Security:* The NRC will continue to enhance security through safeguards and security licensing reviews, threat assessments, and regulatory improvements including improving regulations and finalizing security rulemakings. The activities will include license amendment and security plan change reviews, coordination with intelligence and law enforcement agencies on threats to licensed facilities, and coordination with the DHS and other Federal and State agencies to integrate response planning. The activities will also include the resolution of policy and technical issues related to nuclear security and safeguards at power reactors.

*Program Assessment Rating Tool (PART).* The NRC reviewed the Reactor Licensing and Rulemaking program in FY 2005 for Budget Year 2007.

The Office of Management and Budget (OMB) rated this program as moderately effective with an overall score of 74 percent in FY 2005 for Budget Year 2007. The program earned high scores for

program purpose and design and for program management. The OMB noted that the purpose was clear and that the program used operating plan information to manage and improve program performance. The following table shows the NRC's update to OMB concerning the status of the identified followup actions.

| Follow-up Action | Status | Comments |
|---|---|---|
| (1) While the program has achieved efficiencies in the past, it does not have procedures in place to systematically measure, monitor, and achieve efficiencies and lacks efficiency measures. Over the coming year, the program intends to develop an efficiency measure. The measure is expected to be: "greater than 70 percent of selected processes deliver desired efficiency improvements." The program needs to determine which reactor licensing actions will be measured as well as appropriate baselines and targets; these outputs will support the overall efficiency measure for the program. | Completed September 2006. | 1) The reactor licensing program has developed a number of efficiency measures. In FY 2006, the program had an aggressive measure of reducing the license amendment review time by 5 percent compared to the historical average. Although efficiencies have been pursued, the program has not demonstrated the 5 percent reduction. Reasons for this are under review and are being considered for future action. 2) In FY 2007, the program will implement process enhancements to permit improvement of rulemaking petition timeliness by 5 percent. Process enhancements have been identified. The program will pursue implementation of the enhancements based on resource availability. 3) Also in FY 2007, the program will achieve an average 5 percent reduction in license renewal resources for applications completed during the year. Program is pursuing the 5 percent reduction in resources and is assessing potential means to measure program efficiency gains. 4) Further, in the FY 2008 Performance Budget cycle, the program is re-evaluating its performance measures to ensure that they are challenging in achieving its program goals. |

| Follow-up Action | Status | Comments |
|---|---|---|
| (2) Resource needs are not presented in a complete and transparent manner. Over the coming year, the program will update the operating and leadership plans to include strategic outcomes and performance measures provided in the agency budget document and strategic plan. This will help provide transparency and strengthen the alignment of the program operations with the goals of the agency as a whole. Additionally, the agency's budget document will be updated to state which strategic outcomes and performance measures apply to each program in each program section, and will cross-reference these measures by providing them in the performance measures section of the budget document. The agency's budget document will also include an explanation of the common prioritization process. This will include an explanation of the process for how budgetary resources are allocated to achieve planned accomplishments (PA) in order or priority, as well as the criteria used for relative ranking of PAs. | Completed October 2006 | Resources associated with programmatic activities are monitored on a monthly basis, using NRC's revised Performance Monitoring Report, to identify out-of-standard activities and to determine corrective actions to bring activities back into alignment within annual goals. The content and reporting of Office metrics in the Report are organized according to strategic plan goals and measures. This provides a direct link between the goals, measures and the associated metrics. During FY 2006, resources associated with programmatic activities are monitored on a monthly basis, using NRR's revised Performance Monitoring Report, to identify out-of-standard activities and to determine corrective actions to bring activities back into alignment within annual goals. The content and reporting of Office metrics in the Performance Monitoring Report are organized according to strategic plan goals and measures. This provides a direct link between the goals, measures, and the associated metrics. |

| Follow-up Action | Status | Comments |
|---|---|---|
| (3) The Program does not have assessments performed regularly. There have been evaluations performed by independent entities, such as NAS, GAO, and the NRC IG, that have touched upon some aspects of the program. However, there has not been a comprehensive assessment of the type described in the PART guidance. Over the coming year, the program needs to secure a regularly scheduled independent assessment of sufficient scope and quality, including an evaluation of the program's annual and long term performance measures, ability to deliver results to all relevant stakeholders, and efficiency and effectiveness with regard to strategic planning and program management. | On Track | The Commission has directed the staff to actively engage the Office of the Inspector General (OIG) on planned PART reviews so that the OIG can fully consider scheduling beneficial evaluations in the formulation of the OIG Annual Audit Plan. Because the OIG has independence and has direct access to agency records and material, the Commission believes that reliance on the OIG to perform upcoming PART reviews is the most operationally effective approach. In addition, the Commission has directed the staff to contract with an outside organization to conduct independent program evaluations. Following the first two audits, the staff is to provide the Commission with a report, including an assessment of the quality of the external audits, the effectiveness of identifying implementation actions that have the potential to improve organizational performance, and a recommendation regarding whether these reviews should continue on a routine basis. The NRC plans to begin contracting with an outside organization to conduct independent evaluations of its programs beginning in FY 2007, provided that sufficient funds are available. |
| (4) The program needs to re-calibrate its targets during the FY 2007 budget process to be more ambitious and demonstrate continuous improvement. | Completed during the FY 2006 budget cycle | During the FY 2008 budget process, NRR re-evaluated each of the Safety Goal Performance Measures. Two of the performance measure targets were lowered to be more aggressive and reflect actual performance history. The other safety goal performance measure targets were re-evaluated, and it was determined that they were sufficiently aggressive, given the history and purpose of the measure. In addition, a new performance measure for new reactors was developed and identified in the Effectiveness Goal. This re-evaluation was discussed with the PRC in April 2006, and the PRC agreed with the staff's assessment of the performance measure targets, either as modified or as left unchanged. |

*Strategic Outcomes and Performance Measures.* The Reactor Licensing and Rulemaking activities support a number of the agency's strategic outcomes and performance measures, which Chapter 5 of this document describes in detail. Specifically, reactor licensing activities support Safety goal strategic outcomes 1.1, 1.3, 1.4, and 1.5 and performance measures 1, 2, 3, 4, 5, and 6; Security goal strategic outcome 2.1 and performance measures 1, 2, 3, 4, and 5; Openness goal strategic outcome 3.1 and performance measures 1 and 2; and Effectiveness goal strategic outcome 4.1, and performance measures 1, 2, and 3.

*Output Measures.* The requested resources will support agency efforts to achieve the output targets described in the following tables. The tables provide historical performance data, if available, on the FY 2003 - FY 2006 measures. A description of the program's most significant accomplishments in FY 2006 follows the tables.

| Output Measure: Licensing actions completed per year. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | Complete 1,500 licensing actions, including conversions to improved Standard Technical Specifications. | Complete 1,500 licensing actions, including conversions to improved Standard Technical Specifications. | Complete 1,500 licensing actions, including conversions to improved Standard Technical Specifications. | Complete 1,500 licensing actions, including conversions to improved Standard Technical Specifications. | Complete 1,500 licensing actions, including conversions to improved Standard Technical Specifications. | Measure discontinued after FY 2007. |
| Actual: | 1,774 completed. | 1,741 completed. | 1,609 completed. | 1,659 completed. | | |
| This measure supports performance measure 3 of the Effectiveness Goal, while maintaining Safety and Security. | | | | | | |

| Output measure: Age of licensing action inventory.* | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | 96% ≤ 1 yr.<br>100% ≤ 2 yrs. | 96% ≤ 1 yr.<br>100% ≤ 2 yrs. | 90% ≤ 1 yr.<br>100% ≤ 2 yrs. | 96% ≤ 1 yr.<br>100% ≤ 2 yrs. | 96% ≤ 1 yr.<br>100% ≤ 2 yrs. | 96% ≤ 1 yr.<br>100% ≤ 2 yrs. |
| Actual: | 96.3% ≤ 1 yr.<br>100% ≤ 2 yrs. | 91.0% ≤ 1 yr.<br>100% ≤ 2 yrs. | 92.6% ≤ 1 yr.<br>99.9% ≤ 2 yrs. | 97.6% ≤ 1 yr.<br>99.9% ≤ 2 yrs. | | |
| * Excludes license renewal and improved standard technical specifications (iSTS) conversions.<br>This measure supports performance measure 3 of the Effectiveness Goal, while maintaining Safety and Security. | | | | | | |

| Output measure: Other licensing tasks completed per year. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | Complete 350 other licensing tasks. | Complete 350 other licensing tasks. | Complete 500* other licensing tasks. | Complete 500 other licensing tasks. | Complete 500 other licensing tasks. | Measure discontinued after FY 2007. |
| Actual: | 500 other licensing tasks completed. | 671 other licensing tasks completed. | 715 other licensing tasks completed. | 676 other licensing tasks completed. | | |
| *This target increases to reflect the significant increase in the in the inventory as a result of generic communications initiated in FY 2004. This measure supports performance measure 3 of the Effectiveness Goal, while maintaining Safety and Security. | | | | | | |

| Output measure: Age of Other Licensing Task Inventory* | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | New Measure in FY 2008 | | | | | 90% ≤ 1 yr.<br>100% ≤ 2 yrs. |
| Actual: | | | | | | |
| * Excludes multi-plant actions (MPAs).<br>This measure supports performance measure 3 of the Effectiveness Goal, while maintaining Safety and Security. | | | | | | |

| Output measure: Timeliness of completing actions on critical research programs. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | 85% of major milestones met on or before their due date. | 85% of major milestones met on or before their due date. | 85% of major milestones met on or before their due date. | 85% of major milestones met on or before their due date. | 85% of major milestones met on or before their due date. | 85% of major milestones met on or before their due date. |
| Actual: | 80% across programs* | 90% across programs | 81% across programs* | 96% across programs | | |
| 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.<br>*The target was not met as a result of unanticipated emerging work with priorities and schedules equivalent to existing critical research programs.<br>This measure supports performance measure 3 of the Effectiveness Goal, while maintaining Safety and Security. | | | | | | |

| Output measure: Completion of license renewal application reviews. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | Complete major milestones for 3 applications. | Complete major milestones for 4 applications. | Complete major milestones for 4 applications. | Complete major milestones for 4 applications. | Complete major milestones for 3 applications. | Complete major milestones for 4 applications. |
| Actual: | Milestones completed for 3 applications | Milestones completed for 6 applications. | Milestones completed for 4 applications. | Milestones completed for 4 applications. | | |
| This measure supports performance measure 3 of the Effectiveness Goal, while maintaining Safety and Security. | | | | | | |

| Output measure: Negotiate/renew bilateral exchange arrangements between NRC and appropriate foreign counterparts to ensure that an effective framework for NRC's international exchanges is in place. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | Negotiate/renew 3-6 arrangements. | Negotiate/renew 3-6 arrangements | Negotiate/renew 3-6 arrangements. | Negotiate/renew 2-4 arrangements. | Negotiate/renew 3-6 arrangements. | Negotiate/renew 3-6 arrangements. |
| Actual: | Completed 8 arrangements. | Completed 5 arrangements. | Completed 9 arrangements. | Completed 4 arrangements. (2 new bilateral cooperative arrangements were signed and 2 cooperative arrangements were renewed.) | | |
| This measure supports performance measure 3 of the Effectiveness Goal, while maintaining Safety and Security. | | | | | | |

| Output measure: Acceptable technical quality of agency research technical products. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | New Measure in FY 2007 | | | | Combined score ≥3.0 | Combined score ≥3.0 |
| Actual: | | | | | | |
| NRC has developed a process to measure the quality of research products that includes surveying end-users to determine usability and value-added of the product, and feedback from the ACRS on research programs and products. As appropriate, other mechanisms will be developed and added to this process to measure the quality of research products.<br>This measure supports performance measure 3 of the Effectiveness Goal, while maintaining Safety and Security. | | | | | | |

### *FY 2006 Significant Accomplishments*

Reactor License Renewal

In FY 2006, the NRC met major milestones for the review of license renewal applications. The agency issued renewed licenses for Millstone, Point Beach, Browns Ferry and Brunswick. The NRC conducted safety and environmental reviews of 12 applications for 19 reactors at 12 sites. Work to ensure the protection of public safety and to increase public confidence and extend public outreach was an integral part of the agency's license renewal program.

Power Uprates

The NRC approved one measurement uncertainty recapture power uprate, two stretch power uprates, and four extended power uprates (including the Vermont Yankee extended power uprate, which encompassed a number of challenging technical issues and received a thorough review to ensure safe operation at the new power level). These power uprates resulted in a combined increase of an additional 1,285 megawatts thermal (MWt) or 428 megawatts electrical (MWe) to the Nation's electric generating capacity.

Reactor Rulemaking

The agency published four proposed and three final rules in FY 2006. The subjects of the proposed rules were revision of the design-basis threat, redefinition of loss-of-coolant accident break size; revision of the provisions for the NRC's licensing processes for new power reactors under 10 CFR Part 52, "Early Site Permits; Standard Design Certifications; and Combined Licenses for Nuclear Power Plants"; and changes to requirements for Occupational Dose Records and Labeling containers, and the definition of total Effective Dose Equivalent. The three final rules encompassed deletion of antitrust review requirements (in accordance with the Energy Policy Act of 2005), deletion of required submittal of a financial report, and the design certification rule for the AP1000 reactor design.

Furthermore, the agency published an advance notice of proposed rulemaking (ANPR) on risk-informed technical requirements for future reactors. This step will support agency readiness for licensing power reactors of newer technologies than the current fleet, thus ensuring protection of public health and safety.

Emergency Preparedness

The NRC worked with the U.S. Department of Health and Human Services to distribute potassium iodide to States that requested it, conducted numerous outreach initiatives regarding the review of

emergency preparedness regulations and guidance, and improved the licensing infrastructure to support new reactor license applications.

Homeland Security

The NRC assisted DHS with more than 20 comprehensive review visits to power reactors. During comprehensive reviews, agency staff evaluate a facility's security by comparatively analyzing risk within the sector, coordinating with Federal, State, and local response and recovery officials; identifying potential security enhancements and identifying additional measures that may protect against and mitigate the effects of potential terrorist attacks.

The agency continued its work to ensure the security of nuclear power facilities by completing two plant-specific assessments at each plant during FY 2006. These assessments identified measures that should be taken to successfully mitigate the effects of a broad range of terrorist threats including: (1) completion of an independent assessment of spent fuel pools for all plants, and (2) identification of additional mitigating strategies for challenges to the reactor core and containment at each plant.

Reactor Safety Research

The NRC completed the identification of the important variables that influence materials degradation, including an international peer review of the results that are being used to guide the scope of the NRC's research. The NRC's research will be used to predict future materials degradation by developing integrated research programs in collaboration with the nuclear industry and international partners. These multi-faceted research programs support the agency's development of improved in service inspection and monitoring requirements.

## REACTOR OVERSIGHT AND INCIDENT RESPONSE

| Summary | FY 2006 Enacted | FY 2007 President's Budget | FY 2008 Request |
|---|---|---|---|
| **Budget Authority by Program ($K)** | | | |
| Program Resources | 142,345 | 149,281 | 152,275 |
| Infrastructure and Support | 68,494 | 77,009 | 94,084 |
| **Total Budget Authority** | **210,839** | **226,290** | **246,359** |
| Program FTE | 855 | 897 | 890 |
| Infrastructure and Support FTE | 213 | 208 | 220 |
| **Total FTE** | **1,068** | **1,105** | **1,110** |

*FY 2008 Activities*. *(1) Safety:* The NRC will ensure that the licensees of the 104 civilian nuclear power reactors and 34 RTR identify and resolve safety issues before they affect safe plant operations and that the NRC is prepared to respond to incidents or events that affect licensed facilities or operations. This program's key elements are reactor inspection and assessment program oversight, management, and incident response. The inspection program includes risk-informed baseline inspections, enforcement activities and programs, mid-cycle and end-of-cycle performance reviews, licensee emergency preparedness, and continued improvement of the significance determination process (SDP) notebooks. The inspection process's three major elements are (1) baseline inspections that focus on licensee performance in specific functional areas and licensee effectiveness in identifying, resolving, and preventing problems, (2) plant-specific supplemental and reactive inspections in response to inspection findings and operational events and inspections such as for the reactivation of Browns Ferry Unit 1, and (3) generic safety issue inspections that address areas of emerging concern or areas requiring increased emphasis because of recurring problems. The NRC will also continue its efforts to more fully address safety culture in the Reactor Oversight Process (ROP). The NRC will respond to allegations of safety, safeguards, and/or discrimination violations. The NRC will also administer four generic reactor operator fundamental examination sessions per year and approximately 50 site-specific operator licensing examination sessions per year.

In addition, the NRC will work to ensure a high state of incident response readiness by coordinating closely with licensees and, State, local tribal, and Federal agencies to maintain a highly effective Federal incident response capability for operational and terrorist events under the National Response Plan and National Incident Management System.

The NRC will continue to support agency implementation of the regulatory oversight process through various technology and regulatory skills training courses, as identified by offices and regions in the annual needs surveys. A key element of this process is the information technology infrastructure used for reactor simulation and the continued maintenance and replacement of aging computers used in the simulations is important.

*(2) Security:* The NRC will enhance and maintain reactor security through inspections and oversight to confirm the adequacy of nuclear reactor security in the current threat environment. Activities will include baseline and supplemental security inspections including force-on-force exercises, at each nuclear power plant on a three-year cycle to assess security system performance and material control and accountability (MC&A) inspections.

*Program Assessment Rating Tool (PART).* The OMB rated this program as effective with an overall score of 89 in FY 2003 for Budget Year 2005, and noted that the purpose was clear and that the program was well designed and results oriented. In addition, the program has achieved the long-term strategic goal of preventing radiation-related deaths and illnesses, promoting the common defense and security, and protecting the environment in the use of civilian nuclear reactors.

The following table shows the NRC's update to OMB on the status of the identified followup actions.

| Follow-up Action | Status | Comments |
|---|---|---|
| (1) Better linkage of budget requests to accomplishing annual and agency long-term goals is needed. In response, NRC will strengthen the alignment of program performance measures with long-term agency goals. | Completed | Demonstrated via direct linkage of FY 2005 Operations Plan performance measures to the NRC FY 2004-FY 2009 Strategic Plan strategies for meeting the Strategic Plan objective and goals. Each of the operating plan's safety performance measures references one or more of the strategic plan strategies for safety. |
| (2) The NRC will better demonstrate contributions of program activities and resources to outcomes and outputs. Through an agency-wide working group, NRC will improve the efficiency of operating plans. | Completed | Demonstrated through submission of the FY 2007 Performance Budget. |

| Follow-up Action | Status | Comments |
|---|---|---|
| (3) More transparency is needed with respect to how resource allocation decisions are made and how safety indicator goals and program goals contribute to the agency's long-term goals. In response, NRC will better explain the contributions of program activities and resources to outputs. Complete the NRC's review of operating plan format and content to improve the plan's effectiveness as management tools. The scope of the project was separated into two phases to address: (1) improvements that could be implemented in the short-term; and (2) improvements that would require longer-term planning and evaluation. The short-term improvement efforts were completed in December 2004 through the development of a performance reporting framework containing common reporting criteria and format. This framework was implemented during the first quarter of FY 2005. The longer-term efforts to improve the efficiency of operating plans are currently being addressed by an agency-wide working group. | Completed | Demonstrated through submission of the FY 2007 Performance Budget. |

*Strategic Outcomes and Performance Measures.* The Reactor Oversight and Incident Response activities support a number of the agency's strategic outcomes and performance measures, which Chapter 5 of this document describe in detail. Specifically, reactor safety inspection activities support Safety goal strategic outcomes 1.1, 1.3, 1.4, and 1.5, and performance measures 1, 2, 3, 4, 5, and 6; Security goal strategic outcome 2.1 and performance measures 1, 2, 3, 4, and 5; Openness goal strategic outcome 3.1 and performance measures 1 and 2; and Effectiveness goal strategic outcome 4.1 and performance measures 1, 2, and 3.

*Output Measures.* The requested resources will support agency efforts to achieve the output targets in the following tables. The tables provide historical performance data if available, on the FY 2003 - FY 2006 measures. A description of the program's most significant accomplishments in FY 2006 follows these tables.

| Output measure: Number of plants for which the baseline inspection program was completed during the most recently ended inspection cycle.* | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | All required baseline inspection procedures are completed at 103 operating reactors.* | All required baseline inspection procedures are completed at 103 operating reactors.* | All required baseline inspection procedures are completed at 103 operating reactors.* | All required baseline inspection procedures are completed at 103 operating reactors.* | All required baseline inspection procedures are completed at 103 operating reactors.*<br><br>Assumes the re-start of Browns Ferry 1. However, Browns Ferry 1 will be modified. | All required baseline inspection procedures are completed at 104 operating reactors. |
| Actual: | Completed at all reactors. | Completed at all reactors. | Completed at all reactors. | Completed at all reactors. | | |
| *Does not include Brown's Ferry Unit 1, which is currently not operating and not being inspected under the full baseline inspection program. The ROP inspection program is implemented on a calendar-year basis; the most recent inspection cycle ended in December 2006. .Projected data based on anticipated completion of final survey data available Feb 15, 2007.<br>This measure supports Safety Goal performance measures 1-6. | | | | | | |

| Output measure: Timeliness of Significance Determination Process (SDP) evaluations.* | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | 75% complete within 90 days of Inspection Report issue date. | 80% complete within 90 days of Inspection Report issue date. | 85% complete within 90 days of Inspection Report issue date. | 90% complete within 90 days of Inspection Report issue date. | 90% complete within 90 days of Inspection Report issue date. | 90% complete within 90 days of Inspection Report issue date. |
| Actual: | 73.3% findings completed within 90 days (15 findings). | 48.3% findings completed within 90 days (29 findings).** | 68% findings complete within 90 days (22 findings). | 96% findings complete within 90 days (25 findings). | | |
| *Note that the target will incrementally increase to 90% completed within 90 days of inspection report issue date by FY 2006. The data included in this measure reflect only items that were initially considered as greater-than-green and put through the Significance and Enforcement Review Process (SERP). The measure does not include the vast majority of SDP findings that are promptly dispositioned by the inspection staff without the need for further evaluation. A new target is under development for FY 2007.<br>**The target was not met in FY 2004 due to a high closure rate of old items. About two-thirds of the 15 untimely items in FY 2004 were greater than 365 days old. The average age of open items dropped from 301 days as of September 30, 2003, to 238 days as of September 30, 2004.<br>This measure supports Openness Goal performance measure number 2. | | | | | | |

| Output measure: Number of operator licensing examinations administered. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | Meet licensee demand estimated at 50 initial operator licensing examination sessions and 3 generic fundamentals examination sessions. | Meet licensee demand estimated at 50 initial operator licensing examination sessions and 3 generic fundamentals examination sessions. | Meet licensee demand estimated at 50 initial operator licensing examination sessions and 3 generic fundamentals examination sessions. | Meet licensee demand estimated at 50 initial operator licensing examination sessions and 4 generic fundamentals examination sessions. | Meet licensee demand estimated at 50 initial operator licensing examination sessions and 4 generic fundamentals examination sessions. | Meet licensee demand estimated at 50 initial operator licensing examination sessions and 4 generic fundamentals examination sessions. |
| Actual: | Met licensee demand at 61 initial operator licensing examination sessions and 3 generic fundamentals exam sessions. | Met licensee demand at 45 initial operator licensing examination sessions and 4 generic fundamentals exam sessions. | Met licensee demand at 52 initial operator licensing examination sessions and 4 generic fundamentals exam sessions. | Met licensee demand at 37 initial operator licensing examination sessions and 4 generic fundamentals exam sessions. | | |
| This measure supports performance measure 3 of the Effectiveness Goal, while maintaining Safety and Security. | | | | | | |

| Output measure: Time to complete reviews of technical allegations. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | 70% of technical allegations closed within 150 days, 90% within 180 days, and 100% within 360 days. | 70% of technical allegations closed within 150 days, 90% within 180 days, and 100% within 360 days. | 70% of technical allegations closed within 150 days, 90% within 180 days, and 100% within 360 days. | 70% of technical allegations closed within 150 days, 90% within 180 days, and 100% within 360 days. | 70% of technical allegations closed within 150 days, 90% within 180 days, and 100% within 360 days. | 80% of technical allegations closed within 150 days, 90% within 180 days, and 100% within 360 days. |
| Actual: | 84% in less than 150 days. 100% in less than 360 days. | 90% in less than 150 days. 97% in less than 180 days. 99% in less than 360 days.* | 94% in less than 150 days. 98% in less than 180 days. 99% in less than 360 days.* | 93% in less than 150 days. 99% in less than 180 days. 100% in less than 360 days. | | |
| *One allegation exceeded the target due to extended review at another Federal Agency.<br>This measure supports Safety Goal performance measures 5 and 6, Security Goal performance measures 2, 4, and 5, and Openness Goal performance measure number 2. | | | | | | |

| Output Measure: Timeliness in completing enforcement actions. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | Investigation cases:[A]<br><br>100% completed within 360 days of NRC processing time.[B,C]<br><br>Non-Investigation cases:<br><br>100% completed within 180 calendar days. | Investigation cases:<br><br>100% completed within 360 days of OE[D] processing time.<br><br>Non-Investigation cases:<br><br>100% completed within 180 days of OE processing time. | Investigation cases:<br><br>100% completed within 360 days of OE processing time.<br><br>Non-Investigation cases:<br><br>100% completed within 180 days of OE processing time. | Investigation cases:<br><br>100% completed within 360 days of OE processing time.<br><br>Non-Investigation cases:<br><br>100% completed within 180 days of OE processing time. | Investigation cases:<br><br>100% completed within 360 days of OE processing time.<br><br>Non-Investigation cases:<br><br>100% completed within 180 days of OE processing time. | Investigation cases:<br><br>100% completed within 360 days of OE processing time.<br><br>Non-Investigation cases:<br><br>100% completed within 180 days of OE processing time. |
| Actual: | Investigation: None ≥360 days<br><br>Non-Investigation: none ≥180 days | Investigation: None ≥360 days<br><br>Non-Investigation: none ≥180 days | Investigation: None ≥360 days<br><br>Non-Investigation: none ≥180 days | Investigation: None ≥360 days<br><br>Non-Investigation: none ≥180 days | | |

A. Cases involving investigations normally involve wrongdoing or discrimination and by their nature are more resource intensive and less timely. Accordingly, the performance measure for cases involving investigations provides for more staff time.
B. The measuring period starts on the latest of the following dates: (1) inspection exit date, (2) the date the results of an agency investigation are forwarded to the staff, (3) the date that the Department of Justice (DOJ) says NRC may proceed, for cases referred to the DOJ, or (4) the date of the Department of Labor decision that is the basis for the action.
C. NRC processing time is defined as that time from the date the case is opened to the issuance of an enforcement action or other appropriate disposition less: (1) any time the NRC could not act due to the case residing with DOL, DOJ, other government entity or where the licensee requests a lengthy deferment, and (2) any time the NRC could not act due to processing FOIA requests.
D. OE processing time is defined as that time from the date the case is opened or the licensee is briefed on the concern (exit) to the issuance of an enforcement action or other appropriate disposition less: (1) any time the NRC could not act due to the case residing with DOL, DOJ, other government entity or where the licensee or anyone outside the enforcement process causes a lengthy deferment, and (2) any time the NRC could not act due to processing FOIA requests.
This measure supports Safety Goal performance measures 5 and 6 and Security Goal performance measures 1-5.

| Output Measure: Quality in completing investigations. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | 75% of investigations were brought to a conclusion as either substantiated or unsubstantiated. | 90% of investigations were brought to a conclusion as either substantiated or unsubstantiated. | 90% of investigations will develop sufficient information to reach a conclusion regarding wrongdoing.* | 90% of investigations will develop sufficient information to reach a conclusion regarding wrongdoing. | 90% of investigations will develop sufficient information to reach a conclusion regarding wrongdoing. | 90% of investigations will develop sufficient information to reach a conclusion regarding wrongdoing. |
| Actual: | Completed 98 cases, in which 96% (94) were brought to a conclusion as either substantiated or unsubstantiated. | Completed 124 cases, in which 97.5% (121) were brought to a conclusion as either substantiated or unsubstantiated. | Completed 88 investigations, in which 95.5% (84) developed sufficient information to reach a conclusion regarding wrongdoing. | Completed 111 investigations in which 99.1% (110) developed sufficient information to reach a conclusion regarding wrongdoing. | | |
| *Performance measure revised for FY 2005.<br>These measures supports Safety Goal performance measures 5 and 6 and Security Goal performance measures 2, 4, and 5. | | | | | | |

| Output Measure: Timeliness in completing investigations - Target 1. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | 80% of cases closed on the merits as either substantiated or unsubstantiated will be completed in 10 months or less. | 80% of cases closed on the merits as either substantiated or unsubstantiated will be completed in 10 months or less. | 80% of investigations which developed sufficient information to reach a conclusion regarding wrongdoing will be completed in 10 months or less.* | 80% of investigations which developed sufficient information to reach a conclusion regarding wrongdoing will be completed in 10 months or less. | 80% of investigations which developed sufficient information to reach a conclusion regarding wrongdoing will be completed in 10 months or less. | 80% of investigations which developed sufficient information to reach a conclusion regarding wrongdoing will be completed in 10 months or less. |
| Actual: | Completed 94 cases, in which 83% of cases closed on the merits as either substantiated or unsubstantiated were completed in 10 months or less. | Completed 121 reactor cases, in which 80.2% (97) of cases closed on the merits as either substantiated or unsubstantiated were completed in 10 months or less. | Completed 84 reactor cases, in which 72.6% (61) developed sufficient information to reach a conclusion regarding wrongdoing were completed in 10 months or less. | Completed 110 investigations in which 80% (88) developed sufficient information to reach a conclusion regarding wrongdoing were completed in 10 months or less. | | |
| *Performance measure revised for FY 2005.<br>This measure supports Safety Goal performance measures 5 and 6 and Security Goal performance measures 2, 4, and 5. | | | | | | |

| Output Measure: Timeliness in completing investigations - Target 2. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | New measure in FY 2007 | | | | Close 100% of OI investigations in time to initiate civil and/or criminal enforcement action. | Close 100% of OI investigations in time to initiate civil and/or criminal enforcement action. |
| This measure supports Safety Goal performance measures 5 and 6 and Security Goal performance measures 2, 4, and 5. | | | | | | |

| Output Measure: Timeliness in completing assists to staff.* | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | New measure in FY 2005 | | 70% of assists to staff are concluded in < 90 days. | 70% of assists to staff are concluded in < 90 days. | 70% of assists to staff are concluded in < 90 days. | 80% of assists to staff are concluded in < 90 days. |
| Actual: | | | 21 assists to Staff were closed in which 76.2% (16) were closed concluded in < 90 days. | 33 assists to Staff were closed in which 79% (26) were concluded in < 90 days. | | |
| *This measure supports Safety Goal performance measures 5 and 6 and Security Goal performance measures 2, 4, and 5. | | | | | | |

| Output measure: Numbers and types of Reactor technical training courses offered. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | Numbers and types of courses offered will meet 95% of cumulative needs identified by offices and regions in semiannual needs surveys. | Numbers and types of courses offered will meet 95% of cumulative needs identified by offices and regions in semiannual needs surveys. | Numbers and types of courses offered will meet 95% of cumulative needs identified by offices and regions in semiannual needs surveys. | Percentage of identified training needs addressed with training and development opportunities. (Reported annually)<br><br>Target: 95% | Percentage of identified training needs addressed with training and development opportunities. (Reported annually)<br><br>Target: 95% | Percentage of identified training needs addressed with training and development opportunities. (Reported annually)<br><br>Target: 95% |
| Actual: | 100% | 100% | 100% | 100% | | |
| This measure supports performance measure 2 of the Management Goal. | | | | | | |

| Output Measure: Complete the full cycle of force-on-force inspections as scheduled (all applicable facilities inspected over three year time frame). | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | New measure in FY 2008 | | | | | All facilities on schedule (average of 21 inspections per year) |
| Actual: | | | | | | |
| This measure supports Security Goals performance measures 2-4. | | | | | | |

| Output Measure: Emergency Response Performance Index.* | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | 99% | 99% | 99% | 99% | 99% | 99.9 % |
| Actual: | 100% | 100% | 100% | 100% | | |
| *A performance index has been established to provide a single overall performance measure of the agency's readiness to respond to a nuclear or terrorist emergency situation. The index measures the disparate activities of the Incident Response Program. The index averages the degree to which the program functions, ( i.e., 24-hour notification point, response organization staffing, response facility availability, communication reliability - including coordination activities with stakeholders - and response organization training) meet a performance goal of 99.9%. All of the Incident Response Program performance measures are aligned with one of the program functions to determine how each of the program functions meets the established goal. If the index indicates that any measure is not being met, NRC will initiate appropriate corrective measures.<br>This measure supports Safety Goal performance measures 1 and 2. | | | | | | |

### *FY 2006 Significant Accomplishments*

The agency exceeded the 90 percent timeliness goal of completing the ROP and SDP evaluations. Timeliness is achieved when an inspection finding of greater-than-green safety significance using the SDP and completes the evaluations within 90 days. As of September 30, 2006, the agency has evaluated 25 greater-than-green inspection findings and 24 (96 percent) were timely.

As a result of the Davis-Besse Lessons Learned Task Force recommendations, the agency completed initial implementation activities associated with the Commission's direction on safety culture. The staff held frequent public meetings with external stakeholders and, with the full participation of these stakeholders, developed an approach to enhance the ROP to more fully address safety culture. This resulted in modifications to several ROP program documents and subsequent inspector training before implementation. Activities to increase public confidence and extend public outreach were an integral part of the staff's efforts.

On April 1, 2006, the agency implemented the use of the MSPI at all reactors. As a performance indicator, industry and the NRC believed that MSPI was a better overall measure of integrated system performance than the former safety system unavailability (SSU) indicators. The MSPI measures safety system performance by addressing both unavailability and unreliability, assigning the greatest risk weight to the most risk-significant equipment in each of six systems at a particular plant. The MSPI replaced the SSU performance index because of problems with determining the significance of large fault exposure hours, cascading support system unavailability onto the monitored systems, and using deterministic criteria. Data reported for the second and third quarters of Calendar Year (CY) 2006 assessment resulted in eight MSPI systems in the white significance band. The staff is conducting a temporary inspection on data verification of MSPI and will report its findings in early 2007.

The NRC continued to enhance the force-on-force exercise program and carried out 21 force-on-force exercises at commercial operating nuclear power plants as part of its comprehensive security program. The agency uses these exercises to evaluate and improve the effectiveness of plant security programs in preventing radiological sabotage and to assess a nuclear plant's physical protection to defend against a design-basis threat. Additionally, the agency submitted its first annual report to Congress on force-on-force exercise results in July 2006.

The agency continued to refine the security cornerstone of the ROP and initiated, with industry collaboration, a comparison of the effectiveness and efficiency of the agency's revised SDP with an industry-developed alternative. The routine frequencies and scope of inspections required in the reactor baseline inspection program commenced in FY 2006. Concurrently, the agency initiated Phase III MC&A inspections at power reactor spent fuel pools, which it will use to update this inspection program and to ensure that licensees have adequately accounted for all of the spent nuclear fuel in their spent fuel pools.

The agency effectively responded to post-hurricane impacts on licensees. Specifically, Hurricanes Katrina, Rita, and Wilma impacted operating nuclear power plants and the offsite response infrastructure of surrounding governmental jurisdictions. The NRC and DHS coordinated well in the post-event reviews of licensee and State and local emergency preparedness and response capabilities and jointly determined when those capabilities were appropriately restored to support plant restart.

The agency chartered a 2005 Hurricane Season Lessons Learned Task Force. The task force required the members to develop a set of 13 recommendations that can be applied to natural phenomena and included topics such as the National Response Plan, radioactive materials, communications, compensatory measures, recurrence of prior lessons learned, and impact on the NRC staff. The agency assigned these recommendations a priority of 1, 2, or 3. There are three priority 1, eight priority 2, and two priority 3. The recommendations were grouped in the areas of coordination and

communications, roles and responsibilities/management expectations, and caring for the NRC's employee needs. Those items necessary to be completed before the 2006 hurricane season as identified in the Task Force Report were completed on schedule. The full report is available through the NRC's Agency-wide Documents Access and Management System (ADAMS) Website at http://www.nrc.gov/reading-rm/adams.html (ADAMS accession number is ML06090005).

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## NUCLEAR MATERIALS AND WASTE SAFETY

The NRC protects the health and safety of the public and the environment and ensures the secure use and management of radioactive materials through the Nuclear Materials and Waste Safety program. Activities within this program include the regulatory oversight of: (1) nuclear fuel cycle facilities; (2) nuclear materials activities; (3) the storage and disposal of high-level waste (HLW); (4) the decommissioning of nuclear reactors and other facilities and low-level waste management; and (5) the transportation of radioactive materials and the interim storage of spent nuclear fuel both at and away from reactor sites. This program also includes the environmental reviews conducted as part of the oversight efforts and international efforts to enhance domestic and global nuclear materials and waste safety.

In FY 2008, the NRC and 34 Agreement States will regulate approximately 22,000 specific and 150,000 general licensees. Licenses are issued for uranium extraction, conversion, and enrichment facilities; nuclear fuel fabrication facilities; and fuel research and pilot facilities. Licenses are also issued for large and small users of nuclear material for industrial, medical, or academic purposes, such as radiographers, hospitals, private physicians, nuclear gauge users, and universities. Homeland security efforts in this program area include safeguards and security reviews and inspections, force-on-force exercises, regulatory improvements, and implementation of a national registry (the National Source Tracking System (NSTS)) of radioactive sources of concern. The NRC will continue to maintain a high state of incident response readiness and to communicate and partner with other Federal, State, and local agencies. With respect to the storage and disposal of HLW, the NRC is responsible for licensing decisions and regulatory oversight, the U.S. Environmental Protection Agency (EPA) is responsible for developing standards (which the NRC is required to implement), and the DOE is responsible for characterizing the potential site at Yucca Mountain in the State of Nevada and for developing and operating the repository if a license is granted.

In FY 2008, resources will provide for pre-licensing and prehearing activities related to the anticipated receipt of the DOE application for a HLW repository. Beginning in FY 2007, responsibility for the decommissioning of two additional power reactors, two early demonstration reactors, 14 research and test reactors, and 40 uranium recovery sites was consolidated in the Decommissioning and Low Level Waste (LLW) program. In addition, responsibility for the review of license applications for, and the inspection of, uranium recovery facilities was transferred from Fuel Facilities to the Decommissioning and Low-Level Waste program. As part of its FY 2008 decommissioning activities, the NRC will conduct licensing activities at approximately 16 decommissioning power and early demonstration reactors, 11 decommissioning test and research reactors, and approximately 18 complex materials and fuel facility sites. In addition, NRC will conduct decommissioning and licensing activities at 15 sites licensed by NRC under Title II of the Uranium Mill Tailings Radiation Control Act (UMTRCA), 21 sites DOE is remediating under Title I of UMTRCA, and three source material sites in the uranium recovery activity. Regarding

transportation of radioactive materials and the interim storage of spent nuclear fuel, the NRC's oversight responsibilities include maintaining the operational safety of spent fuel in storage, preparing for dry storage at operating and decommissioning reactors, and certifying packages used to transport radioactive materials.

## BUDGET OVERVIEW

| Summary | FY 2006 Enacted | FY 2007 President's Budget | FY 2008 Request |
|---|---|---|---|
| **Budget Authority by Major Program ($K)** | | | |
| Program Salaries and Benefits | 99,889 | 94,460 | 91,643 |
| Program Contract Support and Travel | 60,951 | 48,755 | 39,811 |
| Subtotal Program | 160,840 | 143,215 | 131,454 |
| Infrastructure and Support Salaries and Benefits | 22,424 | 23,276 | 22,981 |
| Infrastructure and Support Contract Support and Travel | 35,293 | 40,585 | 44,971 |
| Subtotal Infrastructure and Support Allocation | 57,717 | 63,861 | 67,952 |
| **Total Budget Authority** | **218,557** | **207,076** | **199,406** |
| **FTE Employment by Program** | | | |
| Program FTE | 735 | 691 | 654 |
| Infrastructure and Support FTE | 176 | 170 | 164 |
| **Total FTE** | **911** | **861** | **818** |

The FY 2008 budget request for the Nuclear Materials and Waste Safety major program is $199.4 million, including 818 FTE. The overall FY 2008 total includes $2.0 million to provide oversight of certain DOE radioactive waste activities incidental to reprocessing consistent with the NRC's responsibilities under the Ronald W. Reagan National Defense Authorization Act for FY 2005.

Nuclear Material Users resources primarily decrease for homeland security activities including rulemakings, and for materials licensing reviews. Efforts for web-based licensing, and research support for human reliability issues and dose assessments are eliminated in FY 2008. The Decommissioning and Low-Level Waste program resources decrease primarily due to termination of research activities; resources also decrease for waste incidental to reprocessing activities. The

High-Level Waste Repository program decreases due to use of prior year Nuclear Waste Fund appropriations.

## BUDGET AUTHORITY AND FULL-TIME EQUIVALENTS BY PROGRAM

| Summary | FY 2006 Enacted | FY 2007 President's Budget | FY 2008 Request |
|---|---|---|---|
| **Budget Authority by Program ($K)** | | | |
| Fuel Facilities | 40,069 | 35,596 | 34,287 |
| Nuclear Materials Users | 80,058 | 76,444 | 71,791 |
| High-Level Waste Repository* | 45,657 | 40,982 | 37,250 |
| Decommissioning and Low-Level Waste | 28,139 | 28,300 | 27,842 |
| Spent Fuel Storage and Transportation | 24,634 | 25,754 | 28,236 |
| **Total Budget Authority** | **218,557** | **207,076** | **199,406** |
| **Full-Time Equivalent Employment by Program** | | | |
| Fuel Facilities | 197 | 165 | 151 |
| Nuclear Materials Users | 340 | 341 | 312 |
| High-Level Waste Repository* | 132 | 113 | 117 |
| Decommissioning and Low-Level Waste | 127 | 129 | 126 |
| Spent Fuel Storage and Transportation | 115 | 113 | 112 |
| **Total FTE** | **911** | **861** | **818** |

*The NRC plans to use approximately $6 million, including 19 FTE, in FY 2007 and $19.7 million, including 39 FTE, in FY 2008 from its prior-year Nuclear Waste Fund appropriations.

## Justification of Program Requests

The Nuclear Materials and Waste Safety major program consists of five sub-programs as discussed in the following pages.

## FUEL FACILITIES

| Summary | FY 2006 Enacted | FY 2007 President's Budget | FY 2008 Request |
|---|---|---|---|
| **Budget Authority by Program ($K)** | | | |
| Program Support | 27,461 | 22,500 | 21,063 |
| Infrastructure and Support | 12,608 | 13,096 | 13,225 |
| **Total Budget Authority** | **40,069** | **35,596** | **34,287** |
| Program FTE | 158 | 130 | 122 |
| Infrastructure and Support FTE | 39 | 35 | 29 |
| **Total FTE** | **197** | **165** | **151** |

*FY 2008 Activities*. *(1) Safety:* Resources support the NRC's regulatory programs at fuel cycle facilities and related research. The regulated facilities include 21 fuel cycle facilities (7 major and 10 minor fuel cycle facilities, two gaseous diffusion enrichment facilities, and two gas centrifuge facilities). Additionally, the NRC will hire and train staff in preparation for reinitiating review of the mixed-oxide (MOX) fuel fabrication facility in FY 2009, activities include implementation of a safety, safeguards, and security inspection program based on the risk significance of licensee operations and the facility performance history. The agency will also conduct approximately five licensee performance reviews per year. Activities include legal advice and counsel for individual licensing actions, including enrichment facilities; license amendments for major fuel cycle facilities; uranium recovery facilities and risk-informing the Commission's regulatory framework for materials licensing and regulatory oversight. Research activities include support for the license review and inspection activities for the MOX fuel fabrication facility.

*(2) Security:* Resources support homeland security activities including conducting physical protection and material control and accounting (MC&A) reviews of NRC-licensed fuel facilities; implementing security enhancements; and supporting the baseline inspection program for physical protection, MC&A, and force-on-force exercises at Category I fuel facilities. Security activities will include conducting homeland security reviews and inspections, and developing international safeguards policy and implementing International Atomic Energy Agency (IAEA) safeguards, to strengthen controls for the possession, handling, import, and export of nuclear materials. Resources also provide for resolving policy and technical issues and developing strategies to prevent or mitigate potential vulnerabilities. The NRC will enhance the regulatory framework and related licensing and oversight efforts to ensure adequate security of nuclear and radioactive material in the current threat environment.

*Program Assessment Rating Tool (PART).* The OMB rated this program as effective with an overall score of 89 in FY 2003 (Budget Year 2005). The program earned high scores for Program Purpose and Design and Program Management. The OMB noted that the purpose was clear and the program well-designed and results-oriented. In addition, OMB noted that this program has met all of its strategic goal measures since Government Performance and Results Act reporting began in 1997.

NRC's update to OMB regarding the status of the identified follow-up actions are shown in the following table:

| Follow-up Action | Status | Comments |
|---|---|---|
| (1) Better linkage of budget requests to accomplishing agency annual and long-term goals is needed. In response, the NRC will strengthen the alignment of program performance measures with long-term agency outcomes. | Completed | Demonstrated via direct linkage of FY 2005 Operations Plan performance measures to the NRC FY 2004-FY 2009 Strategic Plan strategies for meeting the Strategic Plan objective and goals. Each of the operating plan's safety performance measures reference one or more of the strategic plan strategies for safety. |
| (2) More transparency is needed in how resource allocation decisions are made and how the program contributes to achievement of the agency's long-term goals. In response, the NRC will better demonstrate contributions of program activities and resources to outputs. | Completed | Page 45 of the FY 2007 Performance Budget indicates that this action was completed July 2004. |
| (3) The NRC will better demonstrate contributions of program activities and resources to outcomes and outputs. Through an agency-wide working group, NRC will improve the efficiency of operating plans. The scope of the project was separated into two phases to address: 1) improvements that could be implemented in the short-term; and 2) improvements that require longer-term planning and evaluation. | Action taken, but not completed | The short-term improvement efforts were completed in December 2004 through the development of a performance reporting framework containing common reporting criteria and format. This framework was implemented during the first quarter of FY 2005. The longer-term efforts to improve the efficiency of operating plans are currently being addressed by an agency-wide working group. Schedule for completion is during FY 2007. |

In addition, OMB recommended that the NRC conduct more regular, independent evaluations of program effectiveness to confirm that the program is achieving its intended results. The Commission has directed the staff to actively engage the Office of the Inspector General (OIG) on planned PART reviews so that the OIG can fully consider scheduling beneficial evaluations in the formulation of the OIG Annual Audit Plan. Because the OIG has independence and has direct access to agency records and material, the Commission believes that reliance on the OIG to perform upcoming PART reviews is the most operationally effective approach. In addition, the Commission has directed the

staff to contract with an outside organization to conduct independent program evaluations. Following the first two audits, the staff is to provide the Commission with a report, including an assessment of the quality of the external audits, the effectiveness of identifying implementation actions that have the potential to improve organizational performance, and a recommendation regarding whether these reviews should continue on a routine basis. The NRC plans to begin contracting with an outside organization to conduct independent evaluations of its programs beginning in FY 2007, provided that sufficient funds are available.

*Strategic Outcomes and Performance Measures.* The Fuel Facilities activities support a number of the agency's Strategic Outcomes and performance measures, described in detail in Chapter 5 of this document. Specifically, Fuel Facilities activities support the Safety goal Strategic Outcomes number 1.2, 1.3, 1.4, and 1.5, and performance measures 5 and 6; Security goal Strategic Outcome 2.1, and performance measures 1, 2, 3, 4, and 5; Openness goal Strategic Outcome 3.1, and performance measures 1 and 2; and, Effectiveness goal Strategic Outcome 4.1, and performance measures 1, 2, and 3.

*Output Measures.* The requested resources will support agency efforts to achieve the output targets in the following tables. The tables provide historical performance data on the measures from FY 2003. In addition, following these tables are the most significant accomplishments for this program in FY 2006 are listed after the tables.

| Output Measure: Timeliness of fuel cycle licensing actions (amendments, renewals, new applications, and reviews) from the date of acceptance (for licensing actions received after October 1, 2000). | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | 75% ≤ 180 days<br>100% ≤ 2 yrs. | 75% ≤ 180 days<br>100% ≤ 2 yrs. | 75% ≤ 180 days<br>100% ≤ 2 yrs. | 80% ≤ 180 days<br>100% ≤ 2 yrs. | 85% ≤ 180 days<br>100% ≤ 2 yrs. | 85% ≤ 180 days<br>100% ≤ 2 yrs. |
| Actual: | 89% ≤ 180 days<br>100% ≤ 2 yrs. | 91% ≤ 180 days,<br>100% ≤ 2 yrs. | 98% ≤ 180 days,<br>100% ≤ 2 yrs. | 95% ≤ 180 days,<br>100% ≤ 2 yrs. | | |
| This measure supports Effectiveness Goal, performance measure 3 while maintaining Safety and Security. | | | | | | |

| Output Measure: Number of fuel cycle licensing actions (amendments, renewals, new applications, and reviews) from the date of acceptance completed per year.* | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | New measure to begin in FY 2006 | | | Complete 53 licensing actions. | Complete 52 licensing actions. | Complete 52 licensing actions. |
| Actual: | | | | 64 completed. | | |
| *Output measure excludes licensing actions involved in a hearing.<br>This measure supports Safety Goal performance measures 5 and 6, Security Goal performance measures 1 and 2, and Effectiveness Goal performance measure 3. | | | | | | |

## NUCLEAR MATERIALS AND WASTE SAFETY

Output Measure: Timeliness of Safety and Safeguards inspection modules.
Complete core inspections as scheduled in Fuel Cycle Master Inspection Plan on time.*

| | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 |
|---|---|---|---|---|---|---|
| Target: | < 10% overdue | < 10% overdue | < 10% overdue** | < 10% overdue | < 7% overdue | < 7% overdue |
| Actual: | 0% overdue (Completed 117 inspections) | 2% overdue (Completed 78 inspections/98 modules) | 0% overdue (Completed 93 inspections/178 modules) | 1% overdue (completed 100 inspections/202 modules) | | |

*Output modified in FY 2003 to replace Temporary Instruction 2600/007 with Inspection Manual chapter 2600.
**In FY 2005, NRC began tracking modules completed rather than inspections conducted to improve alignment between Headquarters and regional inspection activities and because it is a better measure of performance. (Note: These actual changes are due to transferring uranium recovery activities to Decommissioning/Low Level Waste.)
This measure supports Safety Goal, performance measure number 6.

Output Measure: Safety and safeguards inspection modules.
Complete all core and reactive inspection modules as scheduled in Fuel Cycle Master Inspection Plan. (NOTE: Uranium Recovery (UR)) Output of 13 Inspection Modules moved from fuel facilities to decommissioning/low level waste for each fiscal year.)

| | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 |
|---|---|---|---|---|---|---|
| Target: | New measure to begin in FY 2006 | | | Complete155 safety inspection modules and 10 safeguards inspection modules. | Complete 208 safety inspection modules and 10 safeguards inspection modules. | Complete 205 safety inspection modules, 70 MC&A inspection modules, and 10 safeguards inspection modules. |
| Actual: | | | | Completed 202 safety inspection modules. | | |

This measure supports Safety Goal performance measure number 6, and Security Goal, performance measure numbers 2, 3, and 4.

| Output Measure: Timeliness in completing enforcement actions. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | New measure to begin in FY 2006 | | | Investigation cases:<br><br>100% completed within 360 days of OE processing time.<br><br>Non-Investigation cases:<br><br>100% completed within 180 days of OE processing time. | Investigation cases:<br><br>100% completed within 360 days of OE processing time.<br><br>Non-Investigation cases:<br><br>100% completed within 180 days of OE processing time. | Investigation cases:<br><br>100% completed within 360 days of OE processing time.<br><br>Non-Investigation cases:<br><br>100% completed within 180 days of OE processing time. |
| Actual: | N/A | N/A | N/A | Investigation:<br>None ≥360 days<br><br>Non-Investigations:<br>None ≥180 days | | |
| This measure supports Safety Goal performance measure numbers 5 and 6, and the Security Goal, performance measures 1-5. | | | | | | |

| Output Measures: Timeliness in completing reviews for technical Allegations. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | New measure to begin in FY 2006 | | | 70% ≤ 150 days<br>90% ≤ 180 days<br>100% ≤ 360 days | 70% ≤ 150 days<br>90% ≤ 180 days<br>100% ≤ 360 days | 80% ≤ 150 days<br>90% ≤ 180 days<br>100% ≤ 360 days |
| Actual: | | | | 93% in less than 150 days. 100% in less than 180 days. 100% in less than 360 days. | | |
| This measure supports Safety Goal performance measure numbers 5 and 6, and the Security Goal, performance measures 1-5. | | | | | | |

### *FY 2006 Significant Accomplishments*

In June 2006, the NRC staff issued a license to Louisiana Energy Services (LES) to construct and operate the National Enrichment Facility, a commercial gas centrifuge uranium enrichment facility proposed to be located in Lea County, New Mexico. The staff's safety evaluation report (NUREG-1827) and final environmental impact statement (NUREG-1790) were issued in June 2005. The staff completed these reviews and issued the license in accordance with an aggressive 30 month schedule. The NRC staff participated in both a contested and mandatory hearing administered by the Atomic Safety and Licensing Board. During and following these reviews, the NRC staff conducted five

public meetings in the area of the proposed facility to provide information on the NRC licensing and inspection processes and to seek input from the public for the environmental impact statement.

The NRC staff completed its review of the USEC Inc. license application for the American Centrifuge Plant, a commercial gas centrifuge uranium enrichment facility proposed to be located in Piketon, Ohio. The staff's safety evaluation report (NUREG-1851) was issued in September 2006 and the final environmental impact statement (NUREG-1834) was issued in May 2006. During these reviews, the NRC staff conducted three public meetings in the area of the proposed facility to provide information on the NRC licensing process and to seek input from the public for the environmental impact statement. The NRC staff expects to issue its licensing decision in FY 2007 following the completion of the mandatory hearing.

In support of efforts to develop a Community of Practice, Nuclear Material Safety and Safeguards (NMSS) established in FY 2006 a highly successful Knowledge Management Seminar series. Designed for newer employees to learn the history and background of past and current events, the seminars are informal discussions led by senior technical staff and open to attendance for all interested staff. Questions and interactive discussion among the participants are encouraged. In FY 2006 seven seminars were held on the following topics: (1) the Sequoyah Fuels accident; (2) the criticality accident at Tokaimura; (3) the General Electric Fuel near-criticality accident; (4) plutonium and mixed-oxide fuel; (5) chemical forms of uranium in the fuel cycle; (6) gaseous diffusion technology; and (7) the 10 CFR Part 70 hearing process.

The NRC conducted several significant fuel cycle licensing reviews. License renewals were completed for BWX Technologies, Inc. Safety analyses for controlling hazardous materials and the engineered and human performance barriers relied on to control hazardous materials, among other issues, were reviewed to ensure that the fuel facilities are operating safely and securely.

The NRC conducted comprehensive reviews of "first of a kind" Integrated Safety Analysis submitted by licensees in response to new requirements in 10 CFR Part 70. An Integrated Safety Analysis increases the use of risk information to identify hazards; the engineered and human performance relied on to control hazards; and the management measures for ensuring that controls are available and reliable. Integrated Safety Analysis reviews were completed for BWX Technologies, Inc.; and AREVA NP Inc. (formerly Framatome, ANP). By identifying the most risk-significant issues in the review, the new Integrated Safety Analysis process is expected to reduce the cost of reviewing the license to both the NRC and the licensee while potentially increasing the safety of overall fuel facility operations.

## NUCLEAR MATERIALS USERS

| Summary | FY 2006 Enacted | FY 2007 President's Budget | FY 2008 Request |
|---|---|---|---|
| **Budget Authority by Program ($K)** | | | |
| Program Support | 56,235 | 49,732 | 47,094 |
| Infrastructure and Support | 23,823 | 26,712 | 24,697 |
| **Total Budget Authority** | **80,058** | **76,444** | **71,791** |
| Program FTE | 270 | 276 | 252 |
| Infrastructure and Support FTE | 70 | 65 | 60 |
| **Total FTE** | **340** | **341** | **312** |

*FY 2008 Activities*. *(1) Safety:* Resources provide for licensing, inspection, event evaluation, incident response, allegation, and rulemaking activities to maintain the regulatory infrastructure needed for processing and handling nuclear materials. The agency will complete approximately 1,700 materials licensing actions and 1,500 routine health and safety inspections in FY 2008. Resources also support the NRC's responsibility under the Energy Policy Act of 2005 to regulate a broader definition of byproduct materials.

The NRC will save resources in the materials inspection program by implementing a more risk-informed set of inspection priorities and inspection procedures, focusing those resources more precisely on the types of facilities and licensee activities that are most critical to maintaining safe operation. The NRC's FY 2008 budget request reflects these efficiencies. The NRC will continue to work on approximately 15-20 active materials and waste rulemakings per year and will issue 5-8 proposed or final rules per year. The NRC will conduct materials activities related to Agreement States and Liaison, including Agreement State oversight, technical assistance, regulatory development, and cooperative efforts. The NRC will coordinate with all States, local governments, Indian Tribes, and interstate organizations in matters relating to nuclear materials and waste safety. Resources provide for information technology and information management supporting the program, such as materials license tracking systems. In addition, the agency will use the resources to complete reviews and issue NRC import/export authorizations, support the U.S. Government and international efforts to enhance nuclear materials and waste safety, conduct materials-related wrongdoing investigations, support adjudicatory hearings for materials licensing and enforcement proceedings, and offer technical training.

*(2) Security:* Resources are provided for developing a national registry (the National Source Tracking System) of radioactive sources of concern that will improve controls on risk-significant radioactive materials to prevent their malevolent use. In addition, resources provide for conducting NRC's Agreement States and liaison materials activities regarding enhanced control and security actions for materials licensees, as well as cooperative efforts and liaison with all States, local governments, Indian Tribes, and interstate organizations in matters relating to homeland security for nuclear waste and materials.

*Program Assessment Rating Tool (PART).* This review was conducted in FY 2004 for Budget Year 2006. OMB rated this program as effective with an overall score of 93. In response to OMB's findings, the NRC will (1) provide with the FY 2007 Budget a clearer demonstration of the contributions of specific program activities to agency goals; (2) create program goals that will support the mission of the agency; and (3) schedule an evaluation of the program consistent with guidance in OMB Circular A-11 prior to the submission of the FY 2007 Budget.

NRC's update to OMB regarding the status of the identified follow-up actions is shown in the following table:

| Follow-up Action | Status | Comments |
|---|---|---|
| (1) Provide with the 2007 Budget a clearer demonstration of the contributions of specific program activities to agency goals. | Completed | Beginning with the FY 2007 Performance Budget, the NRC budget document has integrated budget and performance, clarifying the linkage between the budget's performance measures, output measures, and the agency's strategic outcomes and identifying the performance measures supported by each of the activities under the agency's major programs. |
| (2) Create program goals that will support the mission of the agency. Complete the NRC review of operating plan format and content to improve the plans' effectiveness as management tools. This project will be carried out in two phases to address: 1) improvements that can be implemented in the short-term; and 2) improvements that will require longer-term planning and evaluation. The short-term improvement efforts were completed in December 2004 through the development of a performance reporting framework containing common reporting criteria and format. This framework was implemented during the first quarter of FY 2005. The longer-term efforts to improve the efficiency of operating plans were addressed by an agency-wide working group. | Completed | Page 52 of the FY 2007 Performance Budget indicates that creation of program goals was completed. Longer term improvements in the Operating Plan format and content were completed with the FY 2007 Operating Plan (October 2006). |

| Follow-up Action | Status | Comments |
|---|---|---|
| (3) Schedule an evaluation of the program consistent with guidance in OMB Circular A-11 prior to the submission of the 2007 Budget. Discuss with OIG the feasibility of having them conduct independent evaluations as required in PART assessments. NRC's Office of the Inspector General (OIG) conducted a review in the Nuclear Materials Users program area. | On Track | The Commission has directed the staff to actively engage the Office of the Inspector General (OIG) on planned PART reviews so that the OIG can fully consider scheduling beneficial evaluations in the formulation of the OIG Annual Audit Plan. Because the OIG has independence and has direct access to agency records and material, the Commission believes that reliance on the OIG to perform upcoming PART reviews is the most operationally effective approach. In addition, the Commission has directed the staff to contract with an outside organization to conduct independent program evaluations. Following the first two audits, the staff is to provide the Commission with a report, including an assessment of the quality of the external audits, the effectiveness of identifying implementation actions that have the potential to improve organizational performance, and a recommendation regarding whether these reviews should continue on a routine basis. The NRC plans to begin contracting with an outside organization to conduct independent evaluations of its programs beginning in FY 2007, provided that sufficient funds are available. |

*Strategic Outcomes and Performance Measures.* The Nuclear Materials Users activities support a number of the agency's Strategic Outcomes and performance measures, described in detail in Chapter 5 of this document. Specifically, Nuclear Materials Users activities support the Safety goal Strategic Outcomes number 1.3, 1.4, and 1.5, and performance measures 5 and 6; Security goal Strategic Outcome 2.1, and performance measures 1, 2, 3, 4, and 5; Openness goal Strategic Outcome 3.1, and performance measures 1 and 2; and, Effectiveness goal Strategic Outcome 4.1, and performance measures 1, 2, and 3.

*Output Measures.* The requested resources will support agency efforts to achieve the output targets in the following tables. The tables provide, where available, historical performance on the measures from FY 2003. In addition, the most significant accomplishments in FY 2006 for this program follow these tables.

| Output Measure: Timeliness of licensing actions- review of application for new materials licenses and license amendments. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | 85% ≤ 90 days<br>100% ≤ 1 yr. | 85% ≤ 90 days<br>100% ≤ 1 yr. | 85% ≤ 90 days<br>100% ≤ 1 yr. | 90% ≤ 90 days<br>100% ≤ 1 yr. | 92% ≤ 90 days<br>100% ≤ 1 yr. | 46% ≤ 90 days<br>100% ≤ 3 yrs. |
| Actual: | 97% ≤ 90 days<br>(3,318 of 3,416)<br>99.8% ≤ 1 yr.<br>(3,409 of 3,416) | 97% ≤ 90 days<br>(2,644 of 2,711)<br>99.9% ≤ 1 yr.<br>(2,709 of 2,711) | 97% ≤ 90 days<br>(2,568 of 2,641)<br>99.9% ≤ 1 yr.<br>(2,638 of 2,641) | 98% ≤ 90 days<br>(2,661 of 2,703)<br>100% ≤ 1 yr.<br>(2,703 of 2,703) | | |
| *Output measure modified in FY 2004 to clarify that licensing actions involved in a hearing are excluded.<br>This measure supports Safety performance measures 5 and 6, Security performance measures 1 and 2, and Effectiveness Goal performance measure number 3. | | | | | | |

| Output Measure: Timeliness of licensing actions - reviews of application for materials license renewals and sealed source and device designs. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | 85% ≤ 180 days<br>100% ≤ 2 yrs. | 85% ≤ 180 days<br>100% ≤ 2 yrs. | 85% ≤ 180 days<br>100% ≤ 2 yrs. | 90% ≤ 180 days<br>100% ≤ 2 yrs. | 92% ≤ 180 days<br>100% ≤ 2 yrs. | 46% ≤ 180 days<br>100% ≤ 3 yrs. |
| Actual: | 97% ≤ 180 days<br>(797 of 820)<br>100% ≤ 2 yrs.<br>(820 of 820) | 98% ≤ 180 days<br>(663 of 678)<br>99.9% ≤ 2 yrs.<br>(677 of 678) | 96% ≤ 180 days<br>(608 of 633)<br>100% ≤ 2 yrs.<br>(633 of 633) | 94% ≤ 180 days<br>(309 of 329)<br>100% ≤ 2 yrs.<br>(329 of 329) | | |
| This measure supports Safety performance measures 5 and 6, Security performance measures 1 and 2, and Effectiveness Goal performance measure number 3. | | | | | | |

| Output Measure: Reviews of Executive Branch proposed Part 810 licenses. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | Complete staff reviews within 60 days for all cases involving non-nuclear weapon states. | Complete staff reviews within 60 days for all cases involving non-nuclear weapon states. | Complete staff reviews within 60 days for all cases involving non-nuclear weapon states. | Complete staff reviews within 60 days for all cases involving non-nuclear weapon states. | Complete staff reviews within 60 days for all cases involving non-nuclear weapon states. | Complete staff reviews within 60 days for all cases involving non-nuclear weapon states. |
| Actual: | Completed 2 staff reviews. 100% were completed within 60 days. | Completed 14 staff reviews. 100% were completed within 60 days. | Completed 4 staff reviews. 100% were completed within 60 days. | Completed 3 staff reviews. 100% were completed within 60 days. | | |
| This measure supports performance measure 3 of the Effectiveness Goal, while maintaining Safety and Security. | | | | | | |

| Output Measure: Timeliness of safety inspections of materials licensees.* | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | < 10% overdue | < 10% overdue | < 10% overdue | < 10% overdue | < 10% overdue | < 10% overdue |
| Actual: | < 1% overdue (completed approx. 650) | < 1% overdue (completed 1,275) | < 1% overdue (completed approx. 1,300) | < 1% overdue (completed approx. 1,152) | | |
| *Prior to FY 2004, only core inspections were counted. Core inspections used to represent the highest inspection priorities (1-2-3). However, with revised Inspection Manual Chapter (IMC) 2800, that distinction no longer applies, so the count now represents all routine and reactive materials inspections.<br>This measure supports Safety performance measures 5 and 6, Security performance measures 1 and 2, and Effectiveness Goal performance measure number 3. | | | | | | |

| Output measure: Materials investigations. Quality in completing investigations. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | 90% of cases closed will be brought to a conclusion as either substantiated or unsubstantiated | 90% of cases closed will be brought to a conclusion as either substantiated or unsubstantiated | 90% of investigations will develop sufficient information to reach a conclusion regarding wrongdoing. | 90% of investigations will develop sufficient information to reach a conclusion regarding wrongdoing. | 90% of investigations will develop sufficient information to reach a conclusion regarding wrongdoing. | 90% of investigations will develop sufficient information to reach a conclusion regarding wrongdoing. |
| Actual: | Completed 68 cases, in which 97% (66) of the cases were closed on the merits as either substantiated or unsubstantiated. | Completed 74 cases, in which 93.2% (69) were closed on the merits as either substantiated or unsubstantiated. | Completed 48 investigations, in which 93.8% (45) developed sufficient information to reach a conclusion regarding wrongdoing. | Completed 50 investigations, in which 98% (49) developed sufficient information to reach a conclusion regarding wrongdoing. | | |
| This measure supports Safety Goal performance measure number 5 and 6, and Security Goal performance measures 1-5. | | | | | | |

| Output Measure: Timeliness in completing investigations - Target 1. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | 80% of cases closed on the merits as either substantiated or unsubstantiated will be completed in 10 months or less. | 80% of cases closed on the merits as either substantiated or unsubstantiated will be completed in 10 months or less. | 80% of cases closed on the merits as either substantiated or unsubstantiated will be completed in 10 months or less. | 80% of cases closed on the merits as either substantiated or unsubstantiated will be completed in 10 months or less. | 85% of investigations which developed sufficient information to reach a conclusion regarding wrongdoing will be completed in 10 months or less. | 85% of investigations which developed sufficient information to reach a conclusion regarding wrongdoing will be completed in 10 months or less. |
| Actual: | Completed 68 cases of which 97% (66) of cases that were closed on the merits as either substantiated or unsubstantiated were completed in 10 months or less. | Completed 69 cases of which 92.8% (64) of cases were closed on the merits as either substantiated or unsubstantiated were completed in 10 months or less. | Completed 45 investigations in which 75.6% (34) were closed on the merits as either substantiated or unsubstantiated were completed in 10 months or less. | Completed 49 investigations in which 83.7% (41) were closed on the merits as either substantiated or unsubstantiated were completed in 10 months or less. | | |
| This measure supports Safety Goal performance measure number 5 and 6, and Security Goal performance measures 1-5. | | | | | | |

| Output Measure: Timeliness in completing investigations - Target 2. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: . | New measure in FY 2007 | | | | Close 100% of OI investigations in time to initiate civil and/or criminal enforcement action. | Close 100% of OI investigations in time to initiate civil and/or criminal enforcement action. |
| Actual: | | | | | | |
| This measure supports Safety Goal performance measure number 5 and 6, and Security Goal performance measures 1-5. | | | | | | |

| Output Measure: Timeliness in completing assists to staff. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | New measure in FY 2005 | | 70% of assists to staff are concluded in < 90 days. | 70% of assists to staff are concluded in < 90 days. | 70% of assists to staff are concluded in < 90 days. | 80% of assists to staff are concluded in < 90 days. |
| Actual: | | | 8 assists to staff were closed in which 100% (8) were concluded in < 90 days. | 21 assists to staff were closed in which 90% (19) were concluded in < 90 days. | | |
| This measure supports Safety Goal performance measure number 5 and 6, and Security Goal performance measures 1-5. | | | | | | |

| Output Measure: Timeliness in completing enforcement actions. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | Investigation cases:<br><br>100% completed within 360 days of NRC processing time.<br><br>Non-Investigation cases:<br><br>100% completed within 180 calendar days. | Investigation cases:<br><br>100% completed within 360 days of OE processing time.<br><br>Non-Investigation cases:<br><br>100% completed within 180 days of OE processing time. | Investigation cases:<br><br>100% completed within 360 days of OE processing time.<br><br>Non-Investigation cases:<br><br>100% completed within 180 days of OE processing time. | Investigation cases:<br><br>100% completed within 360 days of OE processing time.<br><br>Non-Investigation cases:<br><br>100% completed within 180 days of OE processing time. | Investigation cases:<br><br>100% completed within 360 days of OE processing time.<br><br>Non-Investigation cases:<br><br>100% completed within 180 days of OE processing time. | Investigation cases:<br><br>100% completed within 360 days of OE processing time.<br><br>Non-Investigation cases:<br><br>100% completed within 180 days of OE processing time. |
| Actual: | Investigation cases: none ≥360 days<br><br>Non-Investigation cases: None ≥180 days | Investigation cases: none ≥360 days<br><br>Non-Investigation cases: None ≥180 days | Investigation cases: none ≥360 days<br><br>Non-Investigation cases: None ≥180 days | Investigation cases: none ≥360 days<br><br>Non-Investigation cases: None ≥180 days | | |
| This measure supports Safety Goal performance measure numbers 5 and 6, and Security Goal performance measures 1-5. | | | | | | |

| Output Measures: Timeliness in completing reviews for technical allegations. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | 70% ≤ 150 days,<br>90% ≤ 180 days<br>100% ≤ 360 days | 70% ≤ 150 days<br>90% ≤ 180 days<br>100% ≤ 360 days | 70% ≤ 150 days<br>90% ≤ 180 days<br>100% ≤ 360 days | 70% ≤ 150 days<br>90% ≤ 180 days<br>100% ≤ 360 days | 70% ≤ 150 days<br>90% ≤ 180 days<br>100% ≤ 360 days | 70% ≤ 150 days<br>90% ≤ 180 days<br>100% ≤ 360 days |
| Actual: | (4th quarter):<br>87% ≤150 days<br>98% ≤ 180 days<br>100% ≤ 360 days | 90% ≤150 days<br>97% ≤ 180 days<br>99% ≤ 360 days* | 96% ≤ 150 days<br>99% ≤ 180 days<br>100% ≤ 360 days | 96% ≤ 150 days<br>100% ≤ 180 days<br>100% ≤ 360 days | | |
| *Cases involving investigations normally involve wrongdoing or discrimination and by their nature are more resource intensive and less timely. Accordingly, the performance measure for cases involving investigations provides for more staff time.<br>This measure supports Safety Goal performance measure numbers 5 and 6, and Security Goal, performance measures 1-5. | | | | | | |

| Output Measure: Issuance of NRC import/export authorizations | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | Complete reviews for and issue as appropriate, approximately 85-125 NRC import/export authorizations (NRC licenses or amendments). Staff reviews will be completed for 100% of the cases within 60 days. | Complete reviews for and issue as appropriate, approximately 85-125 NRC import/export authorizations (NRC licenses or amendments). Staff reviews will be completed for 100% of the cases within 60 days. | Complete reviews for and issue as appropriate, approximately 85-125 NRC import/export authorizations (NRC licenses or amendments). Staff reviews will be completed for 100% of the cases within 60 days. | Complete reviews for, and issue as appropriate, 160-225 NRC import/export authorizations (NRC licenses or amendments). Staff reviews will be completed for 100% of the cases within 60 days. | Complete reviews for, and issue as appropriate, 160-225 NRC import/export authorizations (NRC licenses or amendments). Staff reviews will be completed for 100% of the cases within 60 days. | Complete reviews for, and issue as appropriate, 160-225 NRC import/export authorizations (NRC licenses or amendments). Staff reviews will be completed for 100% of the cases within 60 days. |
| Actual: | Completed 87 staff reviews. 100% were completed within 60 days. | Completed 85 staff reviews. 100% were completed within 60 days. | Completed 98 staff reviews. 100% were completed within 60 days. | Completed 152 staff reviews. 100% were completed within 60 days. | | |
| This measure supports the Effectiveness Goal, performance measure 3, while maintaining Safety and Security. | | | | | | |

| Output Measure: Reviews of Executive Branch subsequent arrangements. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008 Target** |
| Target: | Complete staff reviews within 60 days for all cases involving non-nuclear weapon states. | Complete staff reviews within 60 days for all cases involving non-nuclear weapon states. | Complete staff reviews within 60 days for all cases involving non-nuclear weapon states. | Complete staff reviews within 60 days for all cases involving non-nuclear weapon states. | Complete staff reviews within 60 days for all cases involving non-nuclear weapon states. | Complete staff reviews within 60 days for all cases involving non-nuclear weapon states. |
| Actual: | Completed 3 staff reviews. 100% were completed within 60 days. | Completed 7 staff reviews. 100% were completed within 60 days. | Completed 2 staff reviews. 100% were completed within 60 days. | Completed 6 staff reviews. 100% were completed within 60 days. | | |
| This measure supports the Effectiveness Goal, performance measure 3, while maintaining Safety and Security. | | | | | | |

### *FY 2006 Significant Accomplishments*

Several of the significant materials users licensing and inspection efforts that were undertaken or completed during FY 2006 are described below. These regulatory efforts allow licensees the use of radioactive material while assuring that adequate safety controls and measures are in place to protect the health and safety of workers and the public, and the environment. In FY 2006, NRC took a number of actions to implement the 2005 Energy Policy Act, for example:

- The NRC completed disposition of public comments on the proposed rule that would establish the regulatory foundation for the National Source Tracking System (NSTS), a database for tracking radioactive sources of concern. After the comment resolution process is completed, NRC will issue the final rule. NRC is planning to expand the NSTS to include sources from Category 3 of the IAEA Code of Conduct as the first major modification to the system after it becomes functional. During 2006, the NRC awarded a contract for development of the NSTS. To date, the requirements validation phase has been completed and the system design is in the final review process.

- The NRC also issued a proposed rule, "Requirements for Expanded Definition of Byproduct Material," which amends several regulations to include certain naturally-occurring radioactive and accelerator produced materials in the definition of byproduct material. The proposed rule includes a definition of "discrete source" and other provisions to address activities and regulatory requirements unique to these newly-defined byproduct materials.

- NRC chaired a task force, comprised of Federal agencies and State organizations, to evaluate the security of radiation sources in the United States and provided recommendations to Congress and the President on ensuring the security of these sources from potential terrorist threats, including acts of sabotage, theft, or use in a radiological dispersal device.

Other significant materials users licensing and inspection efforts were:

The NRC is assisting the U.S. Customs and Border Protection (CBP) to fulfill its Congressional mandate to verify the legitimacy of shipments of radioactive material entering the U.S. through established ports of entry. The NRC regularly provides CBP with information on the licensing of radioactive materials including import-export licensing information, and has established processes to provide around-the-clock technical support to the CBP agency.

During FY 2006, the NRC issued over 1,000 Increased Control Orders imposing additional safety and security measures to licensees that possess greater than International Atomic Energy Agency Category 2 quantities. NRC worked with Agreement States to impose the same requirements through legally-binding agreements on their licensees. The NRC continued to issue security orders to irradiator facilities, manufacturer and distributor facilities, and licensees shipping International Atomic Energy Agency Category 1 quantities. The agency continued efforts to develop a process that would screen new license applications for the need for enhanced security measures, and to identify suspicious uses of nuclear materials.

NRC signed a new Agreement with the State of Minnesota making Minnesota the 34th Agreement State. The agency also conducted 11 IMPEP reviews of Agreement State regulatory programs and one review of an NRC Regional program. NRC modified three of the current 274i Agreements to address security for transportation of radioactive materials.

## HIGH-LEVEL WASTE REPOSITORY

| Summary | FY 2006 Enacted | FY 2007 President's Budget | FY 2008 Request |
|---|---|---|---|
| **Budget Authority by Program ($K)** | | | |
| Program Support | 39,420 | 33,993 | 26,968 |
| Infrastructure and Support | 6,237 | 6,989 | 10,282 |
| **Total Budget Authority*** | **45,657** | **40,982** | **37,250** |
| Program FTE | 108 | 89 | 88 |
| Infrastructure and Support FTE | 24 | 24 | 29 |
| **Total FTE*** | **132** | **113** | **117** |

*The NRC plans to use approximately $6 million, including 19 FTE, in FY 2007 and $19.7 million, including 39 FTE, in FY 2008 from its prior-year Nuclear Waste Fund appropriations.

*FY 2008 Activities*. *(1) Safety:* Resources support the NRC's statutory responsibilities regarding the potential DOE application for a High-Level Waste (HLW) repository. The Congress has approved the President's recommendation of the Yucca Mountain site in Nevada, and DOE is expected to have the license application ready for submission to the NRC in FY 2008. Resource estimates assume the full use of prior year Nuclear Waste funding (approximately $6 million in FY 2007 and $19.7 million in FY 2008).

During FY 2008, the NRC will continue pre-licensing activities, including addressing emergent issues. The NRC will use the Risk-Insights Baseline Report and the Yucca Mountain Review Plan to achieve a more efficient and focused review of the license application. The Risk-Insights Baseline Report will help focus prelicensing and licensing activities on issues that could significantly affect overall repository performance. The Yucca Mountain Review Plan will guide the staff's license application review and help the agency to determine compliance with NRC regulations. Once a license application for a HLW repository is received, NRC will determine whether to adopt the DOE final environmental impact statement and whether to docket the application. If the application is docketed, staff will work to complete a detailed safety review and prepare a safety evaluation report 18 months from the date a license application is docketed. The agency believes the 18 month NRC staff safety review is a "stretch" goal due to the first of a kind nature of the project and the complexity and large number of anticipated allegation reviews. Furthermore, the almost certain probability of a complex highly contentious proceeding means that it will be difficult for the Commission to reach a licensing decision for a high-level waste repository within the three-to-four year statutory time frame.

The NRC will conduct inspection activities addressing repository design confirmation, preclosure safety, performance confirmation, and the effectiveness of the DOE quality assurance program. Additionally, the NRC will review designs for transport and aging (storage) casks for use with the DOE transport, aging, and disposal (TAD) canister-based system. To achieve the performance goal of openness in NRC's regulatory process, resources will support communicating with stakeholders and making the regulatory process accessible to interested stakeholders. In addition, legal advice, counsel, and representation will be provided for staff reviews and Commission actions, including acceptance review of the application and pre-hearing activities.

The NRC will conduct pre-hearing activities regarding the anticipated DOE recertification of its document collection in the Licensing Support Network. The agency will maintain the information systems supporting hearing activities and process new NRC documents for inclusion in the LSN.

Regarding the Package Performance Study to demonstrate the robustness and safety of spent nuclear fuel transportation packages in realistic transportation accidents, the FY 2008 resources continue analysis of full- and quarter-scale transportation cask drop tests conducted through an international cooperative research effort with BAM (Germany).

*(2) Security:* Resources are provided to support the review of security aspects of the proposed Yucca Mountain license application.

*Program Assessment Rating Tool (PART).* Scheduled to be completed in FY 2007 for Budget Year 2009.

*Strategic Outcomes and Performance Measures.* The High-Level Waste Repository activities support a number of the agency's Strategic Outcomes and performance measures, described in detail in Chapter 5 of this document. Specifically, High-Level Waste Repository activities support the Safety goal Strategic Outcomes number 1.2, 1.3, 1.4, and 1.5, and performance measures 5 and 6; Security goal Strategic Outcome 2.1, and performance measures 1, 2, 3, 4 and 5; Openness goal Strategic Outcome 3.1, and performance measures 1 and 2; and, Effectiveness goal Strategic Outcome 4.1, and performance measures 2 and 3.

*Output Measures.* The requested resources will support agency efforts to achieve the output targets in the following tables. The tables provide, where available, historical performance on the measures from FY 2003. In addition, following these tables are the most significant accomplishments in FY 2006 for this program.

| Output Measure: Resolve key technical issues developed during pre-licensing.* | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | Resolve KTI integrated subissues/keep pace with DOE schedule. | Resolution of KTI agreements meets staff timeliness and quality goals. | Resolution of KTI agreements meets staff timeliness and quality goals. | Resolution of KTI and pre-closure concerns meets staff timeliness and quality goals. | Resolution of KTI and pre-closure concerns meets staff timeliness and quality goals. | Resolution of KTI and pre-closure concerns meets staff timeliness and quality goals. |
| Actual: | Met target. | Met target. | Met target. | Met target. | | |
| *This output measure sunsets with receipt of a license application.<br>This measure supports Safety Goal, performance measure number 6. | | | | | | |

| Output Measure: The activities necessary to make a decision on DOE's repository license application will be planned and executed such that the decision can be made on time.* | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | New Measure in FY 2008 | | | | | NRC will decide whether to docket a license application and adopt the DOE final environ-mental impact statement no more than 90 days from receipt of an application. |
| Actual: | | | | | | |
| * This measure applies only after the DOE License Application is received.<br>This measure supports Safety Goal, performance measure number 6. | | | | | | |

| Output Measure: Regulation and guidance necessary to make a decision on DOE's repository license application will be planned and executed such that the decision can be made on time. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | New output measure beginning in FY 2007 | | | | Publish a final 10 CFR Part 63 no more than 6 months after EPA publishes a final revised standard in the Federal Register. | Modify the Yucca Mountain Review Plan no more than 6 months after final 10 CFR Part 63, consistent with EPA's final revised 40 CFR Part 197 published in the Federal Register. |
| Actual: | | | | | | |
| *EPA did not publish final revised standard in FY 2006.<br>This measure supports Safety Goal, performance measure number 6. | | | | | | |

| Output Measure: Ensure that NRC's high-level waste documentary material is made electronically available in compliance with Part 2, Subpart J, and Pre-License Application Presiding Officer and Commission orders. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | New measure in FY 2004. | If appropriate, certify the availability of NRC's high-level waste document collection to the Licensing Support Network (LSN) one month after DOE certifies its document collection. | Ensure continued availability of the NRC high-level waste document collection to the LSN. | Ensure supplementation of the NRC high-level waste document collection to the LSN in accordance with established requirements. | Ensure supplementation of the NRC high-level waste document collection to the LSN in accordance with established requirements. | Ensure supplementation of the NRC high-level waste document collection to the LSN in accordance with established requirements. |
| Actual: | N/A | Met target. LSN certification was completed on schedule. | Met target. | Met target. | | |
| This measure supports Openness Goal, performance measure number 2, and Effectiveness Goal, performance measure number 3. | | | | | | |

| Output Measure: Ensure that HLW Meta-System service level requirements for availability and reliability are met, and that information technology information management systems and business processes are in place to support pre-license application, pre-hearing, or hearing activities on the proposed Yucca Mountain repository. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | New measure in FY 2004. | Resolve information technology and information management issues to keep pace with DOE's schedule. | As appropriate, resolve information technology and information management issues to keep pace with DOE's schedule. | The HLW Meta-System will be operational for the HLW licensing and adjudicatory business process in accordance with established service levels.* | The HLW Meta-System will be operational for the HLW licensing and adjudicatory business process in accordance with established service levels.* | The HLW Meta-System will be operational for the HLW licensing and adjudicatory business process in accordance with established service levels.* |
| Actual: | N/A | Met target. Development of Information Technology/ Information Management systems and business processes is on schedule. | Met target. | Met target. | | |
| *Established service levels support the computation of time described in 10 CFR 2.1017.<br>This measure supports Openness Goal, performance measure number 2, and Effectiveness Goal, performance measure number 3. | | | | | | |

| Output Measure: Independent technical advice on adjudicatory and non-adjudicatory matters; monitor implementation of the LSN. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | New measure in FY 2004. | Establish formal staffing plan and plan for providing Commission with adjudicatory technical support. Begin monitoring prelicensing activities and Licensing Support Network (LSN) implementation. | Complete establishment of Commission Adjudicatory Technical Support program, initiate review of staff licensing documents and provide technical advice to the Commission on the licensing proceeding and the implementation of the LSN. | Maintain existing infrastructure. | Maintain existing infrastructure. | Maintain existing infrastructure. |
| Actual: | N/A | Met target. | Met target. | Met target. | | |
| This measure supports Openness Goal, performance measure number 2, and Effectiveness Goal, performance measure number 3. | | | | | | |

| Output Measure: Timeliness in completing enforcement actions. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | New measure in FY 2005. | New measure in FY 2005. | Investigation cases—100% completed within 360 days of NRC processing time.*<br><br>Non-investigation cases—100% completed within 180 days of NRC processing time. | Investigation cases—100% completed within 360 days of NRC processing time.*<br><br>Non-investigation cases—100% completed within 180 days of NRC processing time. | Investigation cases—100% completed within 360 days of NRC processing time.*<br><br>Non-investigation cases—100% completed within 180 days of NRC processing time. | Investigation cases—100% completed within 360 days of NRC processing time.*<br><br>Non-investigation cases—100% completed within 180 days of NRC processing time. |
| Actual: | N/A | N/A | N/A** | N/A** | | |

*NRC processing time is defined as that time from the date the case is opened or the licenses is briefed on the concern (exit briefing) to the issuance of an enforcement action or other appropriate disposition, less (1) any time the NRC could not act because the case resided with DOI, DOJ, or other Government entity or because the licenses or anyone outside the enforcement process caused a lengthy deferment, and (2) any time the NRC could not act because it was processing FOIA requests.
**Target not applicable because DOE's license application was not received in FY 2005; NRC responsibility for enforcement does not begin until DOE submits its application. DOE's license application is expected late in FY 2008.
This measure supports Safety Goal, performance measure numbers 5 and 6, and Security Goal, performance measures 1-5.

| Output Measure: Timeliness in completing reviews for technical allegations. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | New measure in FY 2005. | New measure in FY 2005. | 70% ≤ 150 days<br>90% ≤ 180 days<br>100% ≤ 360 days | 70% ≤ 150 days<br>90% ≤ 180 days<br>100% ≤ 360 days | 70% ≤ 150 days<br>90% ≤ 180 days<br>100% ≤ 360 days | 70% ≤ 150 days<br>90% ≤ 180 days<br>100% ≤ 360 days |
| Actual: | N/A | N/A | N/A* | N/A* | | |

*Target not applicable because DOE's license application was not received in FY 2005; NRC responsibility for enforcement does not begin until DOE submits its application. DOE's license application is expected late in FY 2008.
This measure supports Safety Goal, performance measure numbers 5 and 6, and Security Goal, performance measures 1-5.

| Output Measure: Regulation and guidance necessary to make a decision on DOE's repository license application will be planned and executed such that the decision can be made on time. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | New output measure beginning in FY 2006 | | | Publish a final 10 CFR Part 63 no more than 6 months after EPA publishes a final revised standard in the Federal Register. | Publish a final 10 CFR Part 63 no more than 6 months after EPA publishes a final revised standard in the Federal Register. | Modify the Yucca Mountain Review Plan no more than 6 months after final 10 CFR Part 63, consistent with EPA's final revised 40 CFR Part 197 published in the Federal Register. |
| Actual: | | | | N/A* | | |
| *EPA did not publish final revised standard in FY 2006.<br>This measure supports Safety Goal, performance measure number 6. | | | | | | |

### *FY 2006 Significant Accomplishments*

NRC staff reached agreement with DOE on key pre-closure topics for pre-licensing interactions. This agreement established guidelines for pre-closure technical interactions that will be used prior to NRC receipt of a license application. These interactions will help the NRC staff understand the type of information that DOE intends to use to support a future license application, such as the design and operation of surface and underground facilities.

Staff issued a final Interim Staff Guidance, HLWRS-ISG-01, Review Methodology for Seismically Initiated Event Sequences, (September 29, 2006, Federal Register, Vol. 71, No. 189, pages 57579 to 57584). This guidance supplements the Yucca Mountain Review Plan, NUREG-1804, Revision 2, for review of seismically initiated event sequences in the pre-closure safety analysis of the proposed Yucca Mountain geologic repository. The guidance provides a methodology to demonstrate compliance with 10 CFR Part 63, considering site-specific hazard and performance reliability of structures, systems, and components, important to safety. Staff also issued, a notice of availability for public comment on the Draft Interim Staff Guidance Document, HLWRS-ISG-02, Preclosure Safety Analysis, Level of Information and Reliability Estimation (September 29, 2006, Federal Register, Vol. 71, no. 189, pages 57584 to 57585). This document supplements the Yucca Mountain Review Plan for NRC staff review of design and operation information and reliability estimates required for the pre-closure safety analysis.

NRC staff observed DOE quality assurance audits. NRC observers assessed the effectiveness of the DOE audit team and the audit process in achieving the audit objectives as part of an effective DOE quality assurance program. Staff observed audits that evaluated (1) laboratory plutonium vitrification project activities; (2) the effectiveness of corrective action plan related requirements and activities; (3) U.S. Geological Survey work on the Yucca Mountain project; (4) repository infiltration model work; and (5) newly revised Yucca Mountain design control processes.

In response to a request from Inyo County, CA, officials, NRC staff met with Inyo County Board of Supervisors on the NRC high-level waste program in Independence, CA; National Park Service staff, in Death Valley, CA; and Inyo county residents in Tecopa, CA. At each meeting, NRC staff members provided an overview of NRC's role in the potential licensing of the geologic repository at Yucca Mountain, and its role in the safe transportation of spent fuel to the potential repository.

NRC staff and contractors made several presentations on key aspects of NRC's HLW program and its independent technical activities involving Yucca Mountain at the "2006 International High-Level Waste Management Conference" in Las Vegas, NV. This conference is a forum for the discussion of the scientific, technical, social, and regulatory aspects of the "back end" of the nuclear fuel cycle, including waste generation, transportation, storage, treatment, and disposal.

## DECOMMISSIONING AND LOW-LEVEL WASTE

| Summary | FY 2006 Enacted | FY 2007 President's Budget | FY 2008 Request |
|---|---|---|---|
| **Budget Authority by Program ($K)** | | | |
| Program Support | 20,352 | 19,646 | 18,756 |
| Infrastructure and Support | 7,787 | 8,654 | 9,086 |
| **Total Budget Authority** | **28,139** | **28,300** | **27,842** |
| Program FTE | 107 | 106 | 103 |
| Infrastructure and Support FTE | 20 | 23 | 23 |
| **Total FTE** | **127** | **129** | **126** |

*FY 2008 Activities*. *(1) Safety:* Beginning in FY 2007, responsibility for the decommissioning of two additional power reactors, two early demonstration reactors, 14 research and test reactors, and 40 uranium recovery sites was consolidated in the Decommissioning and Low Level Waste program. In addition, responsibility for the review of license applications for, and the inspection of, uranium recovery facilities was transferred from Fuel Facilities to the Decommissioning and Low Level Waste program. FY 2008 resources support conducting decommissioning licensing and inspection activities at approximately 16 power and early demonstration reactors, 11 research and test reactors and approximately 18 complex materials and fuel facilities sites. In addition, NRC will conduct decommissioning and licensing activities at 15 sites licensed by NRC under Title II of the Uranium Mill Tailings Radiation Control Act (UMTRCA), 21 sites DOE is remediating under Title I of UMTRCA, and three source material sites in the uranium recovery activity. These activities include project management, technical reviews, emergency preparedness and radiation protection inspections at decommissioning reactors, materials and uranium recovery sites, material and fuel facility decommissioning plan reviews, financial assurance reviews, and the review of safety and environmental reports related to decommissioning and uranium recovery operations. Activities also include the review of license applications for, and inspections at, uranium recovery facilities.

In addition, the NRC will continue its oversight of the West Valley Demonstration Project, as necessary, to support the implementation of the West Valley Demonstration Project Act. These activities include NRC's ongoing role as a cooperating agency in the development of DOE's Decommissioning EIS, and consulting with DOE on development of a decommissioning plan and monitoring Project activities. The NRC will continue to work with the EPA on issues associated with the management of radioactive material and to address issues associated with the remediation of sites that fall under the EPA/NRC memorandum of understanding. An Integrated

Decommissioning Improvement Plan has been developed which consolidates recommendations from the License Termination Rule results analysis and a program evaluation.

The NRC's FY 2008 budget includes $2.0 million to provide oversight of certain DOE waste determination activities and plans consistent with the NRC's new responsibilities in the Ronald W. Reagan National Defense Authorization Act (NDAA) for Fiscal Year 2005. This act requires DOE to consult with the NRC on its waste incidental to reprocessing determinations for facilities in South Carolina and Idaho; and directs NRC to monitor DOE disposal actions to assess compliance with the performance objectives in Subpart C of 10 CFR Part 61.

In FY 2007, research activities will provide data and models for assessing public exposure to environmental releases of radioactive materials and the technical basis for decommissioning rulemakings. In FY 2007-FY 2008 legal advice and representation will be provided for staff and Commission activities related to decommissioning nuclear power reactors and materials sites, and legal advice and counsel will be provided on low-level waste issues that may arise, as well as NDAA activities.

This program also supports the regulation and oversight of low-level waste (LLW), including interactions with, and technical assistance to, DOE, the Advisory Committee on Nuclear Waste, and the States on issues of importance in the regulation of LLW. This program supports LLW licensing activities, such as on-site disposal, the review of international experience, guidance development, and import/export reviews.

*(2) Security:* Resources support the review of security aspects for safety licensing actions.

*Program Assessment Rating Tool (PART).* Originally scheduled for FY 2006, this PART review has been delayed at the request of OMB and will be completed in FY 2007 for Budget Year 2009.

*Strategic Outcomes and Performance Measures.* The Decommissioning and Low-Level Waste activities support a number of the agency's Strategic Outcomes and performance measures, described in detail in Chapter 5 of this document. Specifically, Decommissioning and Low-Level Waste activities support the Safety goal Strategic Outcomes number 1.3, 1.4, and 1.5, and performance measures 5; Security goal Strategic Outcome 2.1, and performance measures 1, 2, 3, 4, and 5; Openness goal Strategic Outcome 3.1, and performance measures 1 and 2; and, Effectiveness goal Strategic Outcome 4.1, and performance measures 1, 2 and 3.

*Output Measures.* The requested resources will support agency efforts to achieve the output targets in the following tables. The tables provide, where available, historical performance on the measures from FY 2003. In addition, following these tables are the most significant accomplishments in FY 2006 for this program.

| Output Measure: Maintenance of regulatory framework for low-level waste disposal. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | Provide technical assistance to requesting Agreement States 90% of the time on schedule.<br><br>Initiate technical support on low activity mixed waste.* | Provide technical assistance to requesting Agreement States 90% of the time on schedule.<br><br>Complete assured isolation rulemaking plan.<br><br>Initiate technical support on low activity mixed waste.* | Provide technical assistance to requesting Agreement States 90% of the time on schedule.<br><br>Complete annual review to determine need for rulemaking and/or guidance on extended storage and assured isolation. Initiate revisions to the guidance as necessary.<br><br>Continue support on EPA Advance Notice of Proposed Rulemaking (ANPR) for disposal of low-activity waste. | Provide technical assistance to requesting Agreement States 90% of the time on schedule.<br><br>Complete annual review to determine need for rulemaking and/or guidance on extended storage and assured isolation. Initiate revisions to the guidance as necessary.<br><br>Note that no work is being done by EPA on this.<br><br>Complete high-priority licensing actions as scheduled in the Environmental Protection and Performance Assessment Operating Plan. | Provide technical assistance to requesting Agreement States 95% of the time within agreed upon schedule.<br><br>Complete 1 programmatic improvement identified in the FY 2007 LLW Strategic Assessment.<br><br>Complete licensing actions as scheduled in the Environmental Protection and Performance Assessment Operating Plan. | Provide technical assistance to requesting Agreement States 95% of the time within agreed upon schedule.<br><br>Complete 1 programmatic improvement identified in the FY 2007 LLW Strategic Assessment.<br><br>Complete licensing actions as scheduled in the Environmental Protection and Performance Assessment Operating Plan. |
| Actual: | Met targets. | Met targets. | Met targets. | Met targets. | | |

*Within 30 days of EPA's initiation of its rulemaking on mixed waste, initiate technical support for a proposed rule to establish conditions for disposal of low activity mixed waste in Resource Conservation and Recovery Act Subtitle C facilities.
This measure supports Safety Goal, performance measure numbers 5 and 6, and Effectiveness Goal, performance measure number 3.

## NUCLEAR MATERIALS AND WASTE SAFETY

| Output Measure: Clean-up complex materials, fuel cycle sites, and power reactors; complete uranium recovery licensing actions. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | Remove 1 site from SDMP list after satisfactory cleanup. Conduct 90-day Acceptance Review.* | Remove 1 site from SDMP list after satisfactory cleanup. Conduct 90-day Acceptance Review. | Develop a risk-informed, graded approach to prioritize and manage decommissioning licensing and inspection.<br><br>Complete high priority licensing actions as scheduled in the Decommissioning Operating Plan.** | Complete final guidance to address issues identified in the license termination rule analysis and provide risk-informed approaches for restricted use, more realistic scenarios, and preventing future legacy sites.<br><br>Complete high-priority licensing actions as scheduled in the Decommissioning Operating Plan. | Complete licensing actions as scheduled in the Decommissioning Operating Plan.<br><br>Conduct PART for the Decommissioning Program.<br><br>Complete proposed rule to prevent future legacy sites. | Complete decommissioning and uranium recovery licensing actions as scheduled in the Decommissioning Operating Plan.<br><br>Complete final rule to prevent future legacy sites. |
| Actual: | 1 site removed (Watertown GSA)<br><br>Acceptance reviews were completed within timeliness goals. | 2 sites removed from SDMP (B&W Parks Township and Molycorp-York) 2 complex sites also removed (Envirotest labs and University of Wyoming).<br><br>Acceptance reviews were completed within timeliness goals. | Developed a risk-informed, graded approach to prioritize and manage decommissioning licensing and inspection.<br><br>Completed decommissioning at 8 sites; approved 6 decommission-ing/License Termination Plans, and approved 4 final site radiation surveys. | Completed revision to NUREG-1757 Volumes 1 and 2 to incorporate decommissioning lessons-learned and issues identified in the license termination rule analysis and included risk-informed approach for restricted use, more realistic scenarios, and guidance for preventing future legacy sites.<br><br>Completed decommissioning at 7 sites. | | |

*Output modified in FY 2003 to conduct 90-day Acceptance Review of decommissioning plans and license termination plans submitted.
**Output measure and target modified in FY 2005 due to discontinuance of the SDMP classification, reflecting achievement of the intent of the SDMP list and action plan. All sites, including those with complex technical and policy issues, will now be managed within the context of a comprehensive decommissioning program.
This measure supports Safety Goal, performance measure numbers 5 and 6, and Effectiveness Goal, performance measure numbers 1 and 2.

| Output Measure: Support program licensing activities by preparing and/or reviewing required environmental reports | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | Complete 1 final EIS.<br>Publish NUREG-1748, "Environmental Review Guidance for Licensing Actions Associated with NMSS Programs."* | Complete 1 final EIS and 1 draft EIS.* | Complete 1 final EIS and 1 draft EIS.* | Complete 1 final EIS and 1 draft EIS.* | Complete 1 final EIS and 1 draft EIS.*<br><br>Complete 3 complex EAs. | Complete 1 final EIS and 1 draft EIS.*<br><br>Complete 3 complex EAs. |
| Actual: | Completed 2 draft EISs. Final EIS for MOX facility was delayed due to licensee design changes.<br><br>Published NUREG-1748 in August 2003. | Completed 1 DEIS (LES) and completed 1 FEIS (published Foster Wheeler FEIS, NUREG-1773, in January 2004) | Completed 2 Final EIS (LES, MOX) and 2 draft EIS (USEC, DEIS for controlling the disposition of solid materials rulemaking) | Completed 1 Final EIS (USEC), completed comments as a cooperating agency on the draft West Valley EIS. | | |
| *Within 45 days of acceptance of application and environmental report, publish notice of intent to prepare the EIS and proposed schedule in the Federal Register.<br>This measure supports Safety Goal, performance measure numbers 5 and 6, and Effectiveness Goal, performance measure number 3. | | | | | | |

| Output Measure: DOE waste incidental to reprocessing (WIR) reviews completed. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | Measure to begin in FY 2006. | | | Complete 2 WIR reviews. | Complete 2 WIR Monitoring Plans.<br><br>Complete the draft Final WIR SRP.<br><br>Complete resolution of 2 WIR generic technical and policy issues identified in FY 2006. | Complete monitoring activities as scheduled in the Environmental Protection and Performance Assessment Operating Plan.<br><br>Complete resolution of 2 WIR generic technical and policy issues identified in FY 2006. |
| Actual: | | | | Met Targets.* | | |
| *Completed technical review for Saltwaste Determination in November 2005 and issue the Technical Evaluation report in December 2005, and completed technical review of the Idaho National Laboratory Tank Farm Facility Determination in September 2006 and issued the Technical Evaluation Report in October 2006.<br>This measure supports Safety Goal, performance measure numbers 5 and 6. | | | | | | |

### *FY 2006 Significant Accomplishments*

During FY 2006, NRC conducted regulatory oversight of decommissioning activities at numerous complex materials power reactor sites. NRC completed the decommissioning activities at the Kirtland Air Force Base, Ft. Belvoir, Kerr-McGee Cushing, Heritage Minerals, UCAR, Westinghouse-Blairsville, and DOW sites and approved Decommissioning Plans for the DOW, SCA Holdings sites. Review and approval of Decommissioning Plans, an intermediate step leading to license termination, ensures that procedures and practices proposed by the site operator can be conducted in a manner that is protective of the public health and safety. Termination of the site license allows the site to returned to beneficial use. During FY 2006, the staff continued to improve the manner in which the NRC oversees the decommissioning of nuclear facilities through the implementation of the Integrated Decommissioning Improvement Plan. Specifically, NRC completed development of guidance to address issues identified in the license termination rule analysis and to provide risk-informed approaches for restricted use, more realistic scenarios, and preventing future legacy sites.

NRC staff issued a Technical Evaluation Report in December 2005 documenting its review of an incidental waste determination prepared by the DOE for disposal of salt waste at the Savannah River Site. This was NRC's first waste determination review conducted under the National Defense Authorization Act for Fiscal Year 2005 (NDAA). Under the NDAA, DOE can determine that certain

material resulting from the reprocessing of spent nuclear fuel is not high level waste, and therefore does not need to be disposed of in a geologic repository in order to manage the risks that the waste poses. DOE is required to consult with the NRC on waste determinations performed pursuant to the NDAA. In May 2006, NRC staff issued for public comment a draft Standard Review Plan (SRP) for activities related to DOE waste determinations. The draft SRP is intended to provide guidance to the NRC staff on the technical aspects of waste determination reviews and to establish a consistent process for future reviews. A public meeting was held in November 2005 to allow interested stakeholders an opportunity to provide input regarding the scope and content of the draft SRP.

NRC staff, in conjunction with the National Mining Association (NMA), held the Annual Uranium Recovery Workshop and Public Meeting on the in-situ leach (ISL) rulemaking during the week of June 26, 2006. Stakeholders present at the meeting included NRC and Agreement State licensees, States, EPA, DOE, potential new licensees, consultants, a member of the Advisory Committee on Nuclear Waste, and members of the public. Over 170 people attended the workshop, a record number, with the main theme being a resurgence in the uranium recovery industry due to the increase in the price of uranium and worldwide demand for nuclear fuel. Eight companies with plans to submit new applications for uranium mills attended the meeting. This was an excellent use of staff resources to meet with multiple NRC stakeholders in one setting and staff received positive feedback on the meeting. On June 29, 2006, staff held its first public meeting on the ISL rulemaking. The purpose of this meeting was to give an overview of staff's initiative to eliminate dual regulation at ISL facilities and to elicit input from stakeholders.

NRC research on decommissioning and waste disposal continued to focus on providing more realistic models to address complex contamination problems at decommissioning sites. In FY 2006, the tools and expertise developed in this program supported the agency in its review of site-specific tritium contamination problems raised at several nuclear power plants.

## SPENT FUEL STORAGE AND TRANSPORTATION

| Summary | FY 2006 Enacted | FY 2007 President's Budget | FY 2008 Request |
|---|---|---|---|
| **Budget Authority by Program ($K)** | | | |
| Program Support | 17,372 | 17,344 | 17,573 |
| Infrastructure and Support | 7,262 | 8,410 | 10,663 |
| **Total Budget Authority** | **24,634** | **25,754** | **28,236** |
| Program FTE | 92 | 90 | 89 |
| Infrastructure and Support FTE | 23 | 23 | 23 |
| **Total FTE** | **115** | **113** | **112** |

*FY 2008 Activities*. *(1) Safety:* The NRC will license, certify, and inspect the interim storage of spent fuel from commercial nuclear reactors and the domestic and international transportation of radioactive materials to ensure safety and to meet industry needs. The NRC expects to review applications for independent spent fuel storage installations (ISFSIs) at commercial nuclear power plants, spent fuel storage casks, transportation packages, dual purpose (storage and transport) casks, and route approvals. The NRC will address emergent technical issues such as credit for spent fuel burnup, storage and transport of high burnup fuel, and moderator exclusion, which take advantage of design features that prevent water from entering a spent fuel transportation package. The NRC and the U.S. Department of Transportation will also jointly undertake rulemaking changes for compatibility of NRC with IAEA transport regulations.

Research activities will support the development of probabilistic risk assessment tools and guidance for waste applications and development of technical bases to support fission burnup credit for spent nuclear fuel storage and transportation and the loading of high burnup spent nuclear fuel into storage and transportation casks. In addition, legal advice and representation will be provided for staff and Commission activities concerning spent fuel storage and transportation, and, as appropriate, adjudicatory hearings related to ISFSIs will be held.

*(2) Security:* Resources are provided for security reviews for ISFSIs and transportation of radioactive material in quantities of concern. Resources are also provided for homeland security activities to implement security enhancements through rulemaking as necessary to implement a baseline inspection program for physical protection.

*Program Assessment Rating Tool (PART).* Completed in FY 2005 for Budget Year 2007. OMB rated this program as effective with an overall score of 89 in FY 2005 (Budget Year 2007). The

program earned high scores for Program Purpose and Design and for Program Management. OMB noted that the purpose was clear and the program used operating plan information to manage and improve program performance.

NRC's update to OMB regarding the status of the identified follow-up actions are shown in the following table:

| Follow-up Action | Status | Comments |
|---|---|---|
| (1) The Program does not have assessments performed regularly. There have been evaluations performed by independent entities, such as NAS, GAO, and the NRC IG, that have touched upon some aspects of the program. However, there has not been a comprehensive assessment of the type described in the PART guidance. Over the coming year, the program needs to secure a regularly scheduled independent assessment of sufficient scope and quality, including an evaluation of the program's annual and long term performance measures, ability to deliver results to all relevant stakeholders, and efficiency and effectiveness with regard to strategic planning and program management. | On Track | The Commission has directed the staff to actively engage the OIG on planned PART reviews so that the OIG can fully consider scheduling beneficial evaluations in the formulation of the OIG Annual Audit Plan. Because the OIG has independence and has direct access to agency records and material, the Commission believes that reliance on the OIG to perform upcoming PART reviews is the most operationally effective approach. In addition, the Commission has directed the staff to contract with an outside organization to conduct independent program evaluations. Following the first two audits, the staff is to provide the Commission with a report, including an assessment of the quality of the external audits, the effectiveness of identifying implementation actions that have the potential to improve organizational performance, and a recommendation regarding whether these reviews should continue on a routine basis. The NRC plans to begin contracting with an outside organization to conduct independent evaluations of its programs beginning in FY 2007, provided that sufficient funds are available. |
| Resource needs are not presented in a complete and transparent manner. Over the coming year, the program will update the operating and leadership plans to include strategic outcomes and performance measures provided in the agency budget document and strategic plan. This will help provide transparency and strengthen the alignment of the program operations with the goals of the agency as a whole. Additionally, the agency's budget document will be updated to state which strategic outcomes and performance measures apply to each program in each program section, and will cross-reference these measures by providing them in the performance measures section of the budget document. The agency's budget document will also include an explanation of the common prioritization process. This will include an explanation of the process for how budgetary resources are allocated to achieve planned accomplishments (PA) in order of priority, as well as the criteria used for relative ranking of PAs. | Completed | Submission of the FY 2007 Performance Budget shows completion of these actions in February 2006. Page 86 of the Performance Measurement chapter provides a brief explanation of the prioritization process. |

*Strategic Outcomes and Performance Measures.* The Spent Fuel Storage and Transportation activities support a number of the agency's Strategic Outcomes and performance measures, described in detail in Chapter 5 of this document. Specifically, Spent Fuel Storage and Transportation activities

support the Safety goal Strategic Outcomes number 1.2, 1.3, 1.4, and 1.5, and performance measures 5 and 6; Security goal Strategic Outcome 2.1, and performance measure 1, 2, 3, 4, and 5; Openness goal Strategic Outcome 3.1, and performance measures 1 and 2; and, Effectiveness goal Strategic Outcome 4.1, and performance measures 1, 2 and 3.

*Output Measures.* The requested resources will support agency efforts to achieve the output targets in the following tables. The tables provide historical performance, where available, on the measures from FY 2003. In addition, following these tables are the most significant accomplishments in FY 2006 for this program.

| Output Measure: Complete transportation container design reviews within timeliness goals. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | 80% ≤ 8 mos.<br>100% ≤ 2 yrs. | 80% ≤ 8 mos.<br>100% ≤ 2 yrs. | 80% ≤ 8 mos.<br>100% ≤ 2 yrs. | 80% ≤ 7.7 mos.<br>100% ≤ 2 yrs. | 80% ≤ 7.4 mos.<br>100% ≤ 2 yrs. | 80% ≤ 7.0 mos.<br>100% ≤ 2 yrs. |
| Actual: | 80% ≤ 8 mos.<br>99% ≤ 2 yrs.* | 93% ≤ 8 mos.<br>100% ≤ 2 yrs. | 89% ≤ 8 mos.<br>100% ≤ 2 yrs. | 96% ≤ 7.7 mos.<br>100% ≤ 2 yrs. | | |
| *Completion of the NAC-UMS cask took longer than the targeted period to complete due to time involved with obtaining additional information from the applicant and applicant's interim suspension of NRC review.<br>This measure supports Safety Goal performance measures 5 and 6, Security Goal performance measures 1-5, and Effectiveness Goal performance measure number 3. | | | | | | |

| Output Measure: Complete storage container and installation design reviews within timeliness goals. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | 80% ≤ 14 mos.<br>100% ≤ 2 yrs. | 80% ≤ 14 mos.<br>100% ≤ 2 yrs. | 80% ≤ 14 mos.<br>100% ≤ 2 yrs. | 80% ≤ 13.3 mos.<br>100% ≤ 2 yrs. | 80% ≤ 12.6 mos.<br>100% ≤ 2 yrs. | 80% ≤ 11.9 mos.<br>100% ≤ 2 yrs. |
| Actual: | 89% ≤ 14 mos.<br>100% ≤ 2 yrs. | 88% ≤ 14 mos.<br>100% ≤ 2 yrs. | 82% ≤ 14 mos.<br>89% ≤ 2 yrs.* | 85% ≤ 13.3 mos.<br>100% ≤ 2 yrs.* | | |
| * The measure for completion of all storage container and facility cases in less than 2 years was not met . However, this reflects staff completion of all cases that were pending more than 2 years (Idaho Spent Fuel Facility, GE-Morris renewal, and Surry renewal and exemption). There were no cases pending more than 2 years at the end of FY 2005.<br>This measure supports Safety Goal performance measures 5 and 6, Security Goal performance measures 1-5, and Effectiveness Goal performance measure number 3. | | | | | | |

| Output Measure: Number of inspections completed. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | Measure proposed to begin FY 2006 | | | 16 inspections | 16 inspections | 16 inspections |
| Actual: | | | | 16 inspections | | |
| This measure supports Safety Goal performance measures 5 and 6, Security Goal performance measures 1-5, and Effectiveness Goal performance measure number 3. | | | | | | |

| Output Measure: Timeliness of completing actions on critical research programs | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | 85% of major milestones met on or before their due date. | 85% of major milestones met on or before their due date. | 85% of major milestones met on or before their due date. | 85% of major milestones met on or before their due date. | 85% of major milestones met on or before their due date. | 85% of major milestones met on or before their due date. |
| Actual: | 80% across programs* | 90% across programs | 81% across programs* | 96% across programs | | |
| Definition: Critical research programs typically respond to high priority needs from the Commission and NRC's licensing organizations. Critical research programs regarding the highest priority needs identified at the beginning of each fiscal year.<br>*The target was not met as a result of unanticipated requirements within critical research programs and emergent work of equal priority.<br>This measure supports performance measure 3 of the Effectiveness Goal, while maintaining Safety and Security. | | | | | | |

| Output measure: Acceptable technical quality of agency research technical products. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target | New Measure in FY 2007 | | | | Combined score ≥3.0 | Combined score ≥3.0 |
| Actual | | | | | | |
| NRC has developed a process to measure the quality of research products that includes surveying end-users to determine usability and value-added of the product, and feedback from the ACRS on research programs and products. As appropriate, other mechanisms will be developed and added to this process to measure the quality of research products.<br>This measure supports performance measure 3 of the Effectiveness Goal, while maintaining Safety and Security. | | | | | | |

## *FY 2006 Significant Accomplishments*

In February 2006, the NRC issued a license to Private Fuel Storage, LLC, to authorize construction and operation of a first-of-a-kind, away-from-reactor, independent spent fuel storage installation on the reservation of the Skull Valley Band of Goshute Indians, a Federally recognized Indian tribe. When constructed, the proposed above-ground facility will provide temporary storage of spent fuel

from U.S. nuclear power plants. The safe and secure storage of spent nuclear fuel is important to maintain public and environmental safety and to enable the continued use of nuclear reactors.

The NRC completed all post-September 11, 2001 security assessments for spent fuel storage, spent fuel transportation, and non-spent fuel transport, in order to determine the need for any additional security measures for these licensees, and to mitigate potential terrorist threats. Based on the results of the security assessments, the NRC staff concluded that the current security measures, including those enacted since September 11, 2001, are adequate and no additional security measures are required for the storage of spent fuel and the transport of radioactive materials.

In February 2006, the NAS issued a report on the Safe Transport of Spent Nuclear Fuel and High-Level Radioactive Waste in the United States. The NSA initiated this study to provide an independent, objective, and authoritative examination of the risks and to identify the key current and future societal concerns for the transport of spent fuel and high-level radioactive waste. The National Academies of Science concluded that there were no fundamental technical barriers to the safe transport of radioactive materials, that the radiological risk from spent fuel shipments was low and well understood, and that existing regulations are adequate to protect the public during radioactive material shipments. The study recommendations validated the favorable history of spent fuel transport in that there have been over 1,400 commercial, spent fuel shipments since 1979 with no package failures or significant safety issues.

In April 2006, the NRC issued the approval to transport the LaCrosse reactor pressure vessel in a specially designed package under the provisions of 71.41(d), marking the first use of this provision since its inclusion in the regulations in 2004. The provision in 71.41(d) provides a special authorization for those packages where it is impractical to show compliance with the regulations (i.e., large size such as the reactor pressure vessel or a steam generator) provided that the applicant can demonstrate, by alternative means, the overall level of safety is equivalent to that in the regulations and that all the applicable requirements have been met. Additionally, this approval was accomplished in a time frame that allowed for fabrication and onsite packaging, and also met industry needs of a fixed shipping date.

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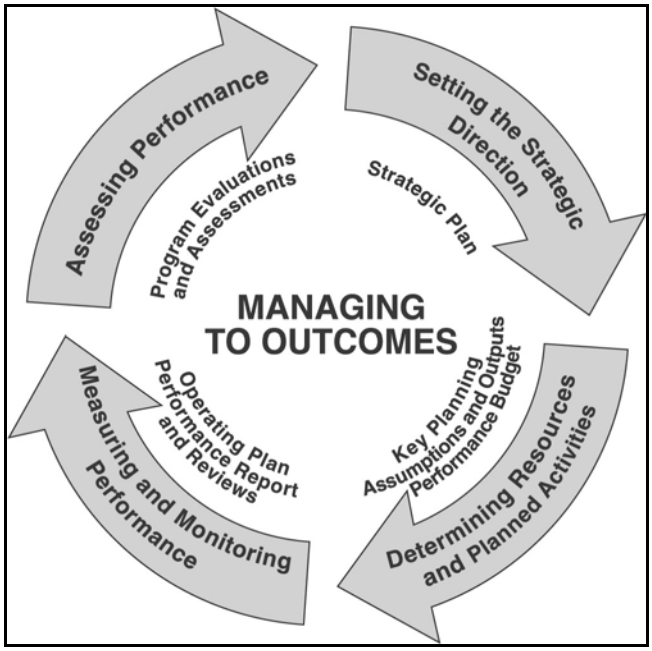
## PERFORMANCE MEASUREMENT

### Performance Measurement

The NRC's Strategic Plan for FY 2004-FY 2009 describes our mission and establishes the Commission direction by defining a vision, strategic objective, goals, strategic outcomes, and strategies and means to accomplish the agency's strategic objective. The FY 2008 Performance Budget uses the Strategic Plan structure to align resources and to show a clear linkage between programs and the agency's goals. In particular, the Performance Budget shows how programs and associated key outputs are aligned to the performance measures for the goals in the Strategic Plan. Specific goals, strategic outcomes, and performance targets are discussed later in this chapter.

Measuring and monitoring performance is one of the four components of the NRC's Planning, Budgeting, and Performance Management (PBPM) process. The other components are Setting the Strategic Direction, Determining Planned Activities and Resources, and Assessing Performance (See figure below).



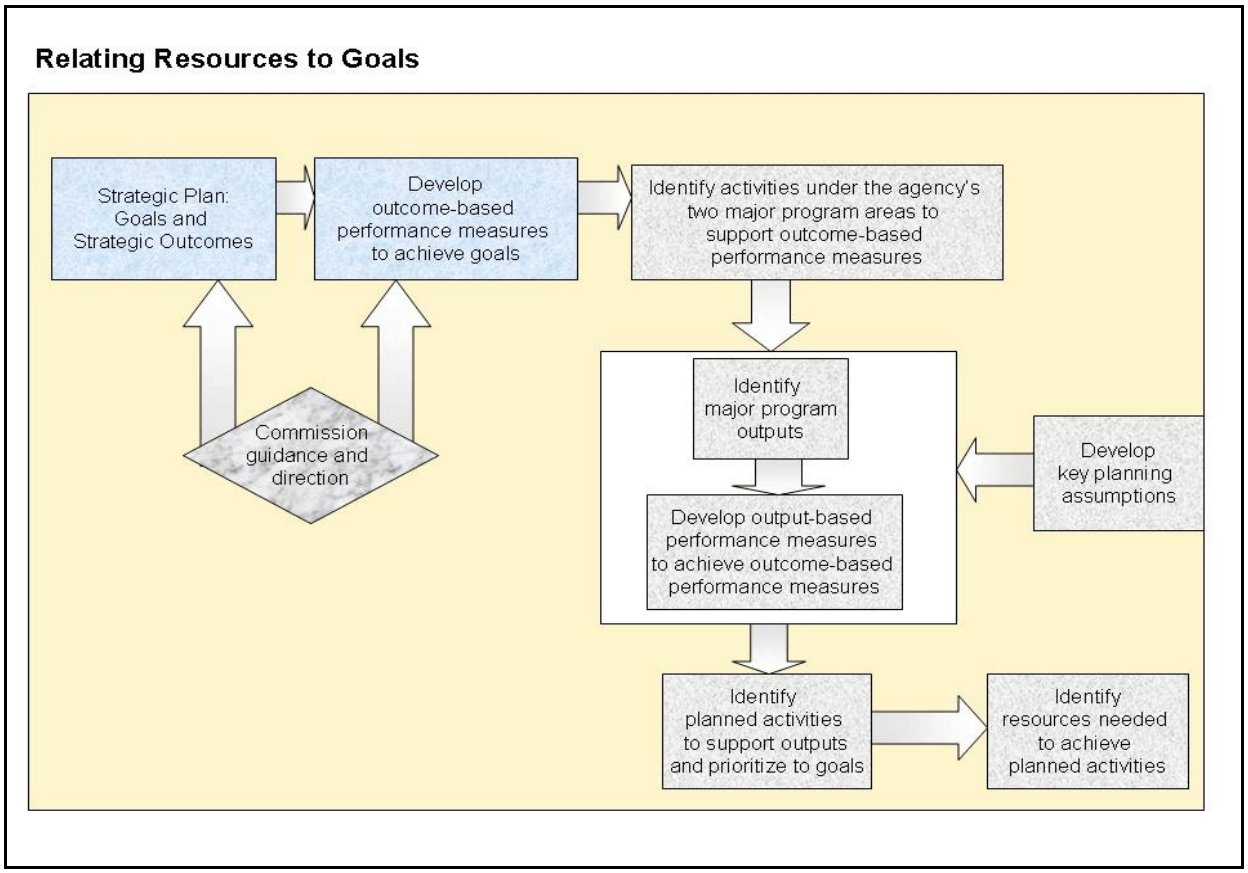

The components of the PBPM process are closely linked and complementary, reflecting a continuous cycle of performance management centered on outcomes. This document integrates the agency's PBPM functions by aligning resources with the agency's goals and establishing performance measures to enable periodic measurement and monitoring of program execution. Annual performance assessments are used to analyze performance and seek improvements in effectiveness and efficiency. The NRC's FY 2004-FY 2009 Strategic Plan establishes the agency's long-term strategic direction and outcomes, and guides the NRC's work and allocation of resources.

## PERFORMANCE MEASUREMENT

### Relating Goals to Resources

The NRC has implemented the PBPM process to accomplish performance budgeting, performance measuring and monitoring, and performance assessments within the agency. The NRC's Strategic Plan describes our mission and establishes the Commission direction by defining a vision, strategic objective, goals, strategic outcomes and strategies. The performance budget integrates the agency's PBPM functions by aligning resources with the agency's goals and establishing performance measures to enable periodic measurement and monitoring of program execution. The figure below illustrates the relationship between goals and resources to effectively accomplish performance budgeting within the agency.

Annually, the Commission provides guidance on the agency's outcome-based performance measures,




which indicate the level of success needed to achieve the agency's goals. In addition, the NRC identifies which activities under the agency's two major program areas support the NRC's outcome-based performance measures; and uses these as guides to formulate the budget. Specifically, the agency develops key planning assumptions, which identify major program drivers that would

significantly influence the NRC's work activities and resource requirements. For each major activity, the agency identifies the major program outputs and output-based measures needed to achieve the outcome-based performance measures, taking into consideration the key planning assumptions. The NRC also identifies and prioritizes planned activities needed to achieve the outputs in each major activity, and prioritizes them based on their contribution to goals. Lastly, the NRC determines the resource requirements needed to achieve each planned activity, forming the basis for developing the agency's budgetary requests for each program area. Each of NRC's performance budget review levels takes into consideration those factors described above in relating outcome-based and output-based performance measures to resources in making budget recommendations and decisions.

## Goals

The NRC's FY 2004-FY 2009 Strategic Plan has five goals: Safety, Security, Openness, Effectiveness, and Management. This document integrates budget and performance, clarifying the linkage between the budget's performance measures, output measures, and the agency's strategic outcomes and identifying the performance measures supported by each of the eight activities under the agency's two major programs. In particular, the Nuclear Reactor Safety and Nuclear Materials and Waste Safety chapters identify which performance measure(s) are supported by each output measure and identify which strategic outcomes and performance measures are supported by the eight activities under the agency's two major programs. These activities include Nuclear Reactor Licensing, Nuclear Reactor Inspection, New Reactors, Fuel Facilities, Nuclear Materials Users, High-Level Waste Repository, Decommissioning and Low-Level Waste, and Spent Fuel Storage and Transportation.

## FY 2008 Resource Allocation by Goal

Adequate protection of public health and safety and the environment has always been, and continues to be, the NRC's primary goal. Accordingly, safety is the most important consideration in evaluating license applications, licensee performance, and proposed changes to the regulatory framework. Because security is essential to the NRC's mission and linked with safety, it is also an important consideration in the agency's actions. The agency continuously works to improve its openness, effectiveness and efficiency, and management excellence consistent with its safety and security mission. The NRC's resources are allocated to its Nuclear Reactor Safety Program and Nuclear Materials and Waste Safety Program areas. Activities in these two major program areas contribute directly to the achievement of the agency's goals. The table below shows the alignment of the NRC's fully costed Nuclear Reactor Safety Program and Nuclear Materials and Waste Safety Program with the goals, Safety and Security.

## PERFORMANCE MEASUREMENT

| ALIGNMENT OF RESOURCES TO NRC GOALS (Dollars in Thousands) | | | | | | |
|---|---|---|---|---|---|---|
| | FY 2007 President's Budget | | | FY 2008 Request | | |
| **Major Program** | **Safety** | **Security** | **Total** | **Safety** | **Security** | **Total** |
| Nuclear Reactor Safety | 519,799 | 41,535 | 561,334 | 669,831 | 39,172 | 709,003 |
| Nuclear Materials and Waste Safety | 177,141 | 29,935 | 207,076 | 173,726 | 25,680 | 199,406 |
| **Total** | 696,940 | 71,470 | 768,410 | 843,557 | 64,852 | 908,409 |

Note: Excludes OIG.

## FY 2008 PERFORMANCE MEASURES
## SAFETY AND SECURITY

### Goal 1 Safety: Ensure protection of public health and safety and the environment.

**Strategic Outcomes**:

1.1 No nuclear reactor accidents.[1]
1.2 No inadvertent criticality events.
1.3 No acute radiation exposures resulting in fatalities.
1.4 No releases of radioactive materials that result in significant radiation exposures.[2]
1.5 No releases of radioactive materials that cause significant adverse environmental impacts.[3]

| GOAL 1: SAFETY PERFORMANCE MEASURES | | | | | | |
|---|---|---|---|---|---|---|
| | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 |
| 1. Number of new conditions evaluated as red by the NRC's reactor oversight process.[4] | | | | | | |
| Target: | New measure in FY 2005 | | ≤ 3 | ≤ 3 | ≤ 3 | ≤ 3 |
| Actual: | | | 0 | 0 | | |
| This is a new measure in the budget; the previous years' actual numbers are: FY 2001 - 1; FY 2002 - 2; FY 2003 - 1; FY 2004 - 1<br>This performance measure was developed such that a single finding (i.e., at a three-unit site) would not exceed the target number of red inputs | | | | | | |
| 2. Number of significant accident sequence precursors (ASPs) of a nuclear reactor accident.[5] | | | | | | |
| Target: | | ≤ 1 | ≤ 1 | ≤ 1 | 0 | 0 | 0 |
| Actual: | | 0 | 0 | 0 | 0 | | |
| 3. Number of operating reactors whose integrated performance entered the Inspection Manual Chapter 0350 process, the multiple/repetitive degraded cornerstone column or the unacceptable performance column of the ROP Action Matrix.[6] | | | | | | |
| Target: | New measure in FY 2005 | | ≤ 4 | ≤ 4 | ≤ 4 | ≤ 3 |
| Actual: | | | 0 | 0 | | |
| This is a new measure in the budget; the previous years' actual numbers are: FY 2001 - 1; FY 2002 - 3; FY 2003 - 2; FY 2004 - 1 | | | | | | |

## PERFORMANCE MEASUREMENT

| GOAL 1: SAFETY PERFORMANCE MEASURES | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| 4. Number of significant adverse trends in industry safety performance.[7] | | | | | | |
| Target: | 0 | 0 | 0 | ≤ 1 | ≤ 1 | ≤ 1 |
| Actual: | 0 | 0 | 0 | 0 | | |
| 5. Number of events with radiation exposures to the public or occupational workers that exceed Abnormal Occurrence Criterion I.A. | | | | | | |
| Reactor Target: | 0 | 0 | 0 | 0 | 0 | 0 |
| Actual: | 0 | 0 | 0 | 0 | | |
| Material Target: | ≤ 6 | ≤ 6 | ≤ 6 | ≤ 6 | ≤ 3 | ≤ 3 |
| Actual: | 0[8] | 0 | 1 | 0 | | |
| Waste Target: | 0 | 0 | 0 | 0 | 0 | 0 |
| Actual: | 0 | 0 | 0 | 0 | | |
| 6. Number of radiological releases to the environment that exceed applicable regulatory limits.[9] | | | | | | |
| Reactor Target:[10] | ≤ 3 | ≤ 3 | ≤ 3 | ≤ 3 | ≤ 3 | 0 |
| Actual: | 0 | 0 | 0 | 0 | | |
| Material Target: | ≤ 5 | ≤ 5 | ≤ 5 | ≤ 5 | ≤ 2 | ≤ 2 |
| Actual: | 0 | 0 | 0 | 0 | | |
| Waste Target: | 0 | 0 | 0 | 0 | 0 | 0 |
| Actual: | 0 | 0 | 0 | 0 | | |

## PERFORMANCE MEASUREMENT

### Goal 2 Security: Ensure the secure use and management of radioactive materials.

### Strategic Outcome:

2.1 No instances where licensed radioactive materials are used domestically in a manner hostile to the security of the United States.

| GOAL 2: SECURITY PERFORMANCE MEASURES | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| 1.. Unrecovered losses of risk-significant [11] radioactive sources | | | | | | |
| Target: | 0 | 0 | 0 | 0 | 0 | 0 |
| Actual: | 0 | 0 | 0 | 0 | | |
| 2. Number of substantiated[12] cases of actual theft or diversion of licensed, risk-significant radioactive sources or formula quantities[13] of special nuclear material; or attacks that result in radiological sabotage[14].[15] | | | | | | |
| Target: | New measure in FY 2007 | | | | 0 | 0 |
| Actual: | | | | | | |
| 3. Number of substantiated[12] losses of formula quantities of special nuclear material or substantiated[12] inventory discrepancies of formula quantities of special nuclear material that are judged to be caused by theft or diversion or by substantial breakdown of the accountability system.[15] | | | | | | |
| Target: | New measure in FY 2007 | | | | 0 | 0 |
| Actual: | | | | | | |
| 4. Number of substantial breakdowns[16] of physical security or material control (i.e., access control, containment, or accountability systems) that significantly weakened the protection against theft, diversion, or sabotage.[15] | | | | | | |
| Target: | New measure in FY 2007 | | | | < 1 | < 1 |
| Actual: | | | | | | |
| 5. Number of significant unauthorized disclosures of classified and/ or safeguards information.[17] | | | | | | |
| Target: | 0 | 0 | 0 | 0 | 0 | 0 |
| Actual: | 0 | 0 | 0 | 0 | | |

**Goal 3 Openness: Ensure openness in our regulatory process.**

**Strategic Outcome**:

3.1 Stakeholders are informed and involved in NRC processes as appropriate.

| GOAL 3: OPENNESS PERFORMANCE MEASURES | | | | |
|---|---|---|---|---|
| | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| 1. Percentage of stakeholders that perceive the NRC to be open in its processes is equal to or greater than other Federal agency measures, when available. | | | | |
| Target: | ≥ Federal Agency Weighted Average | ≥ Federal Agency Weighted Average | ≥ Federal Agency Weighted Average | Measure discontinued after FY 2007 |
| Actual: | New measure in FY 2006 | Not undertaken | | |
| 2. Percentage of selected openness output measures that achieve performance targets. | | | | |
| | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | ≥ 70% | ≥ 78% | ≥ 88% | ≥ 88% |
| Actual: | 50% | 68% | | |

**The following output measures support performance measure 2:**

(a) Ninety percent of stakeholder formal requests for information receive an NRC response within 60 days of receipt. *(Supported by all eight activities under the agency's two major program areas.).*

(b) Ninety percent of non-sensitive, unclassified regulatory documents generated by the NRC and sent to the agency's Document Processing Center are released to the public by the sixth working day after the date of the document. *(Supported by all eight activities under the agency's two major program areas.).*

(c) Ninety percent of nonsensitive, unclassified regulatory documents received by the NRC are released to the public by the sixth working day after the document is added to the ADAMS main library *(Supported by all eight activities under the agency's two major programs areas).*

(d) The NRC achieves a user satisfaction score for its public Web site greater than or equal to the Federal regulatory agency mean score based on results of the yearly American Customer Satisfaction

**PERFORMANCE MEASUREMENT**

Index for Federal Web sites. *(Supported by all eight activities under the agency's two major program areas.).*

(e) The NRC responds to Freedom of Information Act requests in less than or equal to 20 business days. *(Supported by all eight activities under the agency's two major programs areas).*

(f) Issue 90 percent of Director's Decisions under 2.206 within 120 days. *(Supported by the Reactor Licensing, Nuclear Materials Users, Fuel Facilities, Decommissioning and Low-Level Waste, and Spent Fuel Storage and Transportation activities)*.

(g) Make 90 percent of Final Significance Determination Process Determinations within 90 days for all potentially greater than green findings. *(Supported by Reactor Inspection activities)*.

(h) Percentage of stakeholders that believe they were given sufficient opportunity to ask questions or express their views. *(Supported by all eight activities under the agency's two major programs areas)*.

(i) At least 90 percent of Category 1, 2 and 3 meetings on regulatory issues for which public notices are issued 10 days in advance of the meeting. *(Supported by all eight activities under the agency's two major programs areas)*.

(j) Complete all the key stakeholder and public interactions for the reactor performance assessment cycle consisting of mid-cycle review and letter report, end-of-cycle review report and letter, public meetings, agency action review, and Commission meeting. *(Supported by Reactor Inspection activities).*

## PERFORMANCE MEASUREMENT

### Goal 4 - Effectiveness: Ensure that NRC actions are effective, efficient, realistic, and timely.

### Strategic Outcome:

4.1 – No significant licensing or regulatory impediments to the safe and beneficial uses of radioactive materials.

| Goal 4: EFFECTIVENESS - PERFORMANCE MEASURES | | | | |
|---|---|---|---|---|
| | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| 1. The percentage of selected processes that deliver desired efficiency improvement is > 70%. (Goal is > 90% by FY 2008).[18] | | | | |
| 1a. Reactor Licensing Actions (Supported by Nuclear Reactor activities). | | | | |
| Target: | New measure in FY 2006 | Reduce the average time spent conducting reactor license amendment reviews by at least 5% compared to the historical average while maintaining cost and quality at or above FY 2005 level | No measurement target to be established for FY 2007 | Reduce the average age at closure for licensing actions by at least 2.5% compared to the average age at closure for amendments closed during FY 2005 and FY 2006. (Measure to be discontinued after FY 2008) |
| Actual: | | Not met | | |
| 1b. Enforcement Process for Handling Discrimination Allegations (supported by all eight activities under the agency's two major programs areas). | | | | |
| Target: | New measure in FY 2006 | 10% reduction in the average enforcement processing time[19] | 10% reduction in the average enforcement processing time[19] | Measure discontinued after FY 2007 |
| Actual: | | None were issued | | |
| 1c. Fuel Cycle Licensing (supported by Fuel Facilities activities). | | | | |
| Target: | New measure in FY 2006 | For the next cycle of license renewals for Category III fuel cycle facilities, reduce time spent conducting these renewals by 25% as compared to the historical averages with the ultimate goal to reduce the frequency of renewals for these licenses. | Update the regulatory framework to reflect issuance of a 40-year license for Category III facilities.** | Commensurate with a new regulatory framework that provides for a 40-year license term, the next cycle of Category III license renewal applications will be considered for a 40-year license at the rate of one per year. |
| Actual: | | Not met | | |
| *The FY 2006 effort will involve the initiation of necessary regulatory framework changes that would ultimately yield resource savings. **This assumes the Integrated Safety Analysis results support a "living license," licensees maintain their license/basis current, and that there is stakeholder support and Commission acceptance of the proposed changes to the existing regulatory framework. | | | | |

## PERFORMANCE MEASUREMENT

| Goal 4: EFFECTIVENESS - PERFORMANCE MEASURES | | | | |
|---|---|---|---|---|
| | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| 1d. Decommissioning License Termination Review (supported by Decommissioning and Low-Level Waste activities). | | | | |
| Target: | New measure in FY 2006 | Improve the timeliness of the review process for nuclear power reactor License Termination Plans by at least 30% over 3 years as compared to the historical average. | Continuation of FY 2006 3 year metric | Continuation of FY 2006 3 year metric |
| Actual: | | N/A for FY 2006 | | |
| 1e. Incident Response and Emergency Preparedness Exercises (supported by all eight activities under the agency's two major programs areas). | | | | |
| Target: | New measure in FY 2006 | Reduce resources expended in support of each interagency exercise by 5% while still accomplishing agency goals for each exercise. | Reduce resources expended in support of each interagency exercise by 5% while still accomplishing agency goals for each exercise. | Measure discontinued after FY 2007 |
| Actual: | | Met | | |
| 1f. Reactor Rulemaking (supported by Reactor Licensing activities). | | | | |
| Target: | New measure in FY 2007 | | Implement process enhancements to permit improvement of the rulemaking petition timeliness by 5%. | Reduce the average time to complete rulemaking actions by at least 2.5% compared to the historical rolling average. (Measure to be discontinued after FY 2009) |
| Actual: | | | | |

## PERFORMANCE MEASUREMENT

| GOAL 4: EFFECTIVENESS - PERFORMANCE MEASURES | | | | |
|---|---|---|---|---|
| | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| 1g. Reactor Licensing Renewals (supported by Reactor Licensing activities). | | | | |
| Target: | New measure in FY 2007 | | Achieve an average 5% reduction in license renewal resources for applications completed in FY 2007. | Measure discontinued after FY 2007 |
| Actual: | | | | |
| 1h. High-Level Waste Repository Resolution of key technical issues and pre-closure concerns. | | | | |
| Target: | New measure in FY 2008 | | | Reduce the NRC staff cost for letters to DOE documenting how NRC is addressing key issues by 5% from the previous fiscal year, while still meeting the timeliness and quality targets. Baseline data will be collected in FY 2007 (this is an efficiency metric for the output measure entitled "Resolve key technical issues developed during pre-licensing"). |
| Actual: | | | | |
| 2. No more than one instance per program where licensing or regulatory activities unnecessarily impede the safe and beneficial uses of radioactive materials. | | | | |
| Target: | New measure in FY 2006 | Reactor Program = 2 (1 per Tier II program) Materials/Waste Program = 5 (1 per Tier II program) | Reactor Program = 2 (1 per Tier II program) Materials/Waste Program = 5 (1 per Tier II program) | Reactor Program = 3 (1 per Tier II program) Materials/Waste Program = 4 (1 for Fuel Facilities, 1 for HLW, 1 for Decommissioning/LLW, 1 for Spent Fuel Storage/Transportation) |
| Actual: | | Target Met | | |

**Goal 5 Management: Ensure excellence in agency management to carry out the NRC's strategic objective.**

**Strategic Outcomes**:
5.1 Continuous improvement in the NRC's leadership and management effectiveness in delivering the mission.
5.2 A diverse, skilled workforce and an infrastructure that fully supports the agency's mission and goals.

| GOAL 5: MANAGEMENT PERFORMANCE MEASURES | | | | |
|---|---|---|---|---|
| | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| 1. The percentage of selected processes reported by support offices that deliver desired efficiency improvements. | | | | |
| Target: | New measure in FY 2006 | ≥ 75% | ≥ 90% | ≥ 90% |
| Actual: | | 80% | | |

**The following output measures support Management Excellence performance measure number one:**

Ninety percent of selected process reported by support offices deliver desired efficiency improvements:

(a) Percent reduction in time (10 percent in FY 2006 and 5 percent in FY 2007) it takes to add or remove employees from drug testing pool.

(b) Five percent reduction of agency FTEs used to develop and submit the FY 2008 and FY 2009 performance budgets.

(c) Percentage of employees that are hired within 45 days (from the time a vacancy announcement closes until an offer of employment is made).

| GOAL 5: MANAGEMENT-PERFORMANCE MEASURES | | | | |
|---|---|---|---|---|
| | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| 2. Percentage of selected NRC management programs reported by support offices that deliver intended outcomes. | | | | |
| Target: | ≥ 70% | ≥ 70% | ≥ 70% | ≥ 80% |
| Actual: | 60% | 50% | | |

## PERFORMANCE MEASUREMENT

**The following output measures support the Management Excellence performance measure number two.**

Eighty percent of selected NRC management programs reported by support offices deliver intended outcomes:

2.a. Eighty percent of Infrastructure Management activities achieve performance targets.

1. Space Management activity - Space occupancy rate at NRC Headquarters 85-95 percent.

2. Facilities Management - Overall customer satisfaction with NRC Headquarters building services provided by Administration Directorate of 85 percent.

3. Security- No incidents of unauthorized access to NRC Headquarters and Regional Offices that results in personal injury to NRC occupants, property damage or release of protected information.

4. Administrative Support Services - 95 percent of staff are satisfied with administrative support services.

5. Acquisition of Goods and Services - 90 percent of competitive contract actions over $100K are completed within established milestone schedule.

6. Information Technology Infrastructure- 99 percent of time agency-wide key Information Technology infrastructure services are available to the staff.

2.b. Financial Performance/Budget & Performance Integration Program - Seventy percent of Financial Performance/Budget & Performance Integration activities achieve performance targets.

1. Planning, Budget, and Analysis activity - Did NRC submit and publish the Agency's Performance Budget on or before the due dates established by OMB and Congress?

2. Financial Management activity - Did NRC submit and publish the Agency's Performance and Accountability Report (PAR) on or before the due dates established by OMB?

3. Financial Management Activity - Did NRC receive an unqualified opinion on the

Agency's financial statement audit with no material weaknesses?

4. Financial Management activity - Do agency-wide financial systems meet government-wide requirements for financial systems?

5. Financial Management activity - 95 percent of non-salary payments made accurately within established schedule.

6. Financial Management activity - 95 percent of salary payments made accurately within established schedule

7. Cost Accounting - Produce 100 percent of routine quarterly reports at the end of each accounting quarter.

2.c. Expanded Electronic Government Program - Eighty percent of Expanded Electronic Government activities achieve performance targets.

1. Federal Information Security Management Act (FISMA) - Complete certification and accreditation on 90% of the systems scheduled to be accredited.

2. OMB - Achieve 3 out of 5 yellow criteria on OMB e-gov scorecard (4 out of 5 in FY 2007). Achieve 5 out of 5 yellow criteria on the OMB E-Government scorecard (100 percent) in FY 2008.

3. Project Management Methodology (PMM) - PMM pilot test to be completed by the end FY 2006. New development activities will use PMM by FY 2007. In FY 2008: Full implementation for all new development activities.

4. Portfolio Management - review major IT Investments using a Portfolio Management system. 80 percent of major IT investments will be reviewed using Portfolio Management system in FY 2007. In FY 2008: 90 percent of major IT investments will be reviewed using a Portfolio Management system.

**PERFORMANCE MEASUREMENT**

2.d. Management of Human Capital Program - Eighty percent of Human Capital activities achieve performance targets.

1. Recruitment and Staffing - Percent of actual FTE utilization will be within 2 percent of an authorized ceiling.

2. Recruitment and Staffing - 85 percent of professional hires retained for a minimum of 3 years after initial NRC employment.

3. Recruitment and Staffing - 90 percent of human capital strategies to close critical skill gaps are identified within 60 days.

4. Recruitment and Staffing - 25 percent of professional hires at the entry level.

5. Training and Development - 95 percent of identified training needs addressed with training and development opportunities.

2.e. Internal Communication Program - 90 percent of Internal Communication activities that achieve performance target.

1. Internal Web Site - Staff satisfaction with internal web site. New measure in FY 2006. FY 2008: $\geq$ Baseline in FY 2007.

2. Internal Communication Activity - Greater percentage of NRC staff that perceives NRC internal communications to be more effective in FY 2008 than in previous survey.

## ADDRESSING THE PRESIDENT'S MANAGEMENT AGENDA

### Overview

The President's Management Agenda prescribes Governmentwide initiatives to reform the U.S. Government to be more citizen-centered, results-oriented, and market-based, and to actively promote competition rather than stifle innovation. To achieve this goal, the Administration has identified five initiatives to improve Government performance in the areas of (1) strategic management of human capital, (2) budget and performance integration, (3) competitive sourcing, (4) expanded electronic government, and (5) improved financial management. The following describes the NRC's response to these Governmentwide initiatives for FY 2008 in each of the five areas.

### Initiative 1: Strategic Management of Human Capital

**Workforce Planning and Deployment.** With a renewed emphasis on hiring to meet the expected increase in new reactor work, several NRC offices proposed realignments to position themselves better to handle the increase in work. Among these were the NRC's two biggest offices, the Office of Nuclear Reactor Regulation and the Office of Nuclear Material Safety and Safeguards. The Office of Nuclear Reactor Regulation realigned to emphasize the area of new reactors, and the Office of Nuclear Material Safety and Safeguards realigned to enhance cooperation with States and implement a holistic approach to fuel issues including transportation, storage, and disposal.

The use of the NRC's strategic workforce planning tool facilitated the changes in these two offices. This tool is used to determine critical skill/knowledge gaps which enabled the offices to develop a plan to close identified gaps. The use of the strategic workforce planning tool allowed for a smoother planning process to improve workforce deployment, maintain technical capacity, and make informed decisions on human capital strategies for recruitment, development, and retention.

**Talent**. The NRC uses multiple human capital management strategies to build and maintain the technical excellence of the NRC workforce, prepare for emerging work, and address identified critical skill gaps. The agency has streamlined recruitment, relocation, and retention incentives to allow offices to extend job and incentive offers to outside applicants and to position the agency to handle anticipated workload growth, especially in reactor licensing reviews.

Other innovations, such as student loan repayments, waivers of dual compensation limitations, partnerships with colleges and universities, and the Cooperative Education Program, have had an equally positive impact on the agency's efforts to recruit and retain staff with critical skills.

**Leadership and Knowledge Management.** The NRC uses succession planning, training and development, and knowledge management strategies to close identified vital skill gaps to ensure that NRC management and staff acquire and maintain the critical competencies needed to implement the strategic plan. The NRC continues to offer and expand its leadership competency development programs, such as executive leadership seminars, the Senior Executive Service Candidate Development Program, leadership training for new supervisors and team leaders, and the Leadership Potential Program. Knowledge management is a part of the strategic management of human capital, along with strategic workforce planning, recruitment, and training and development. As part of this effort, the NRC is in the process of coordinating its activities to implement knowledge management strategies, including the establishment of a knowledge management Website.

**Accountability.** The NRC continues to evaluate the agency's success in achieving its human capital goals and desired outcomes in the areas of recruitment, staffing, retention, and training and development. In addition, the NRC staff briefs the Commission annually on the agency's humana capital efforts. Twice each year, the NRC analyzes and reports to the Commission on the status of workforce statistics by demographic groups. The analysis includes workforce size and composition, hires, attrition, rotational assignments, performance appraisals, and awards. These statistics are shared throughout the agency.

**Initiative 2: Budget and Performance Integration**

The NRC continues to make progress in achieving budget and performance integration in accordance with the President's Management Agenda. This progress includes adopting new outcome-based performance measures aligned with the agency's strategic plan, accurately monitoring program performance, and integrating performance information with associated costs. NRC will address these initiatives in FY 2008 for the following areas.

**Integrating Planning and Budgeting.** The NRC's planning, budgeting, and performance management process links the NRC's various budget accounts to the agency's safety and security goals and clearly identifies the budgetary resources devoted to them. The agency's FY 2008 budget request identifies the alignment of resources to the NRC's safety and security goals. The associated output measures are also clearly linked to the safety, security, and management and support goals and performance measures.

**Budget Formulation Application.** The NRC continued the development of the budget formulation application and once the pilot configuration and the security requirements are completed , the agency will replace the current outdated single user, desktop database. The web browser, multiuser budget formulation application will increase efficiency by allowing agency wide access to the budget information, real-time aggregation of budget data, and more robust reporting capabilities.

**Full Cost Budget.** NRC program managers currently receive cost reports that show the full cost of major programs. These reports allow managers to plan and manage their programs better throughout the budget year. The NRC's Performance Budget presents the full cost budget to achieve the agency's goals. The NRC will continue to refine the integration of outputs, goals, and assignment of full cost across programs as outlined in guidance from the Office of Management and Budget.

**Initiative 3: Competitive Sourcing**

One of the NRC's corporate management strategies is to acquire goods and services in an efficient manner. To achieve that, the NRC established output measures associated with the implementation of the competitive sourcing initiative under the President's Management Agenda, adopted a performance-based approach to contracting, and posted procurement synopses on the agency's Website. The NRC continues to implement performance-based contracting for facility management services, data entry, information technology, and other support services. To give vendors a better understanding of contract requirements, the NRC includes such criteria as measurable performance requirements, quality standards, quality surveillance plans, and provisions for reducing the fee or price when the vendor fails to perform services as required. The NRC continues to exceed its target for expending eligible service contacting dollars through performance-based contracting. The NRC continues to post on its external Website all required synopses and solicitations for acquisitions valued at more than $25,000.

**Initiative 4: Expanded Electronic Government**

The NRC continued to integrate and align its information technology investments with the Federal Government's Electronic Government program. The NRC uses Electronic Government services for payroll, security clearance, acquisition support, Government-wide customer service, and recruitment, and is currently implementing support for travel and training. In addition, the NRC established procedures to avoid information technology investments that would duplicate other Federal Electronic Government programs and to take advantage of the SMARTBUY program. The NRC is participating in the Financial Management and Human Capital Lines of Business, and the agency is well positioned to take advantage of these programs because the NRC currently receives payroll and human resource services from Department of the Interior. The NRC is also participating in the Information Technology Security Lines of Business. The agency continues analysis of its Electronic Government implementation and alignment efforts as requested by the Office of Management and Budget and maintains key milestone dates.

## PERFORMANCE MEASUREMENT

**Federal Information Security Management Act**. The NRC's compliance in FY 2005 with the requirements of the Federal Information Security Management Act issued by the House Committee on Government Reform's Subcommittee on Technology, Information Policy, Intergovernmental Relations, and the Census resulted in a grade of "D." The NRC has increased efforts to conduct more rigorous independent review, testing, and evaluation of major system security plans. These increased efforts revealed previously undiscovered and unidentified security risks. Following these discoveries, additional efforts were necessary to ensure full and complete system certification resulting in an extension of the certification schedules.

**E-Authentication Guidance.** The Office of Management and Budget issued "E-Authentication Guidance for Federal Agencies," which updated earlier guidance under the Government Paperwork Elimination Act to ensure that on-line Government services are secure and protect privacy. This updated guidance directed agencies to conduct electronic authentication risk assessments and categorize all existing transactions and systems that require user authentication into four "identity assurance levels" which has been completed.

**Information Systems Security.** The NRC established an information systems security Program to ensure that the agency has a comprehensive process covering certification and accreditation of its information technology systems as required by the Federal Information Security Management Act of 2002. Towards this end, the NRC awarded a multi-year, multi-million dollar agencywide consolidated support contract to acquire expert services needed to perform all aspects of the certification and accreditation process. In addition, the NRC awarded a contract to perform self assessments of 30 major and general support systems as required by National Institute of Standards and Technology Special Publication 800-37, "Guide for the Security Certification and Accreditation of Federal Information Systems." As part of the program, the NRC has also instituted a security awareness effort that includes placing computer security awareness posters in common areas throughout the NRC.

**Electronic Information Exchange—Minimizing the Burden on Business.** The NRC maintains an Electronic Information Exchange program that handles approximately 87,000 electronic transactions annually. The NRC's Electronic Information Exchange program plays a major role in enabling the agency to meet the Government Paperwork Elimination Act requirement to allow the public the option of transacting business electronically with the agency. The electronic information exchange is the NRC's process for meeting OMB's e-Gov e-Authentication requirements.

**Information Technology/Information Management Meta-System.** The NRC has integrated several major agency applications agencywide Documents Access and Management System, Electronic Information Exchange, Electronic Hearing Docket, Digital Data Management System, and Licensing Support Network and business processes to support licensing of the Department of Energy's nuclear waste disposal repository at Yucca Mountain, Nevada. To meet the challenges of new nuclear power reactor licensing and licensing Yucca Mountain, the NRC is performing a requirements analysis that targets implementation of new information systems and leverages much of the existing information technology and information management architecture by enhancing computer applications, upgrading computing infrastructure, and improving business processes to provide a more robust, secure, and integrated environment. This collection of business processes, computer applications, and information technology infrastructure components (formerly known as the High-Level Waste Meta-System) is now referred to as the Information Technology/Management Meta-System.

**Initiative 5: Improved Financial Management**

**Financial Management Systems.** The NRC's financial management systems strategy is to improve business processes, systems performance, and information access, and to reduce life-cycle costs by relying on commercial software hosted by shared service providers. A Federal shared service provider currently hosts and operates the NRC's core accounting, payroll, and human resource systems.

The NRC's other financial management systems are maintained internally and interfaced with the core accounting and payroll systems. The core accounting system provides electronic access to daily financial transaction data and periodic reports. Budget, cost, and performance data from multiple financial systems are consolidated into monthly budget execution reports for distribution to senior managers.

The existing core accounting system is at the end of its life cycle and will be replaced by a contemporary commercial software package hosted by a shared service provider. The agency's vision is to integrate the functional requirements of core accounting, fee billing, and cost accounting into one financial management system. A new integrated financial management system will improve the efficiency and effectiveness of the NRC's business processes, provide real-time data to agency managers, and reduce life cycle costs by eliminating the existing systems that are managed within the NRC. The NRC also began work on upgrading its time and labor system, with the long-term goal of having a shared service provider host and operate the system.

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## OFFICE OF THE INSPECTOR GENERAL

The American people expect excellence and accountability from their Government. To that end, the U.S. Congress passed the Inspector General (IG) Act in 1978 to ensure integrity and efficiency in the Federal Government and its programs. In accordance with the 1988 amendment of the act, NRC's Office of the Inspector General (OIG) was established as a statutory entity on April 15, 1989.

OIG's mission is to: (1) independently and objectively conduct and supervise audits and investigations related to NRC programs and operations; (2) prevent and detect fraud, waste, and abuse; and (3) promote economy, efficiency, and effectiveness in NRC programs and operations. In addition, OIG reviews existing and proposed regulations, legislation, and directives and provides comments, as appropriate, on identified significant concerns. The Inspector General also keeps the NRC Chairman and members of Congress fully and currently informed about problems, makes recommendations to the agency for corrective actions, and monitors the NRC's progress in carrying out such actions.

The FY 2003 - FY 2008 OIG Strategic Plan identifies the strategic challenges facing the NRC. The OIG strategic plan is generally aligned with the agency's goals, and focuses on agency programs and operations that involve the major challenges and risk areas for the NRC. OIG's Strategic Plan features three goals which guide the activities of its audit and investigative programs:

OIG Strategic Goals

- Advance NRC's efforts to enhance safety and protect the environment.
- Enhance NRC's efforts to increase security in response to the current threat environment.
- Improve the economy, efficiency, and effectiveness of NRC corporate management.

OIG's FY 2008 budget and performance plan supports the implementation of the OIG's strategic plan and the associated goals and strategies.

## BUDGET OVERVIEW

| Summary | FY 2006 Enacted | FY 2007 President's Budget | FY 2008 Request |
|---|---|---|---|
| **Budget Authority by Function ($K)** | | | |
| Salaries and Benefits | 6,621 | 6,839 | 7,426 |
| Contract Support and Travel | 1,687 | 1,305 | 718 |
| **Total Budget Authority** | 8,308 | 8,144 | 8,144 |
| **FTE** | 49 | 49 | 51 |

OIG is requesting a FY 2008 budget of $8.144 million and 51 FTE. This request reflects a total $0 increase over the FY 2007 budget. The submission includes a salaries and benefits increase of $587,000. Of this amount, $276,000 will support the addition of two FTE to our audit staff. These positions will enhance OIG's capability to focus on NRC activities related to new reactor licensing. The remaining increase of $327,000 represents increased personnel costs in salaries and benefits due to the Federal pay raise and other increases in base pay and benefits necessary to sustain existing staff. The increase in salaries and benefits has been offset by a decrease in contract support and travel funds.

The requested resources will enable OIG to accomplish its strategic goals, thereby assisting NRC in protecting public health and safety and the Nation's common defense and security, by ensuring integrity, efficiency, and accountability in agency programs that regulate the civilian use of byproduct, source, and special nuclear materials.

Further, in accordance with Office of Management and Budget (OMB) requirements, OIG is showing the full cost associated with its programs for the FY 2008 budget with the following caveat. As a result of an October 1989 memorandum of understanding between NRC's Chief Financial Officer and the Inspector General and a subsequent amendment in March 1991, OIG no longer requests that funding for some OIG management and support services be included in the OIG appropriation. It was agreed that funds for OIG infrastructure requirements and other agency support services would instead be included in NRC's main appropriation. For the most part, these costs are not readily severable. Thus, this funding continues to be included in NRC's main appropriation.

## Selected FY 2006 Accomplishments

The following sections discuss examples of the work performed in FY 2006 by the OIG audit and investigative programs.

### *Audits*

In FY 2006, OIG issued 26 audit reports pertaining to NRC programs and operations. These audits either evaluated high-risk agency programs or complied with mandatory financial and computer security-related legislation. The following are examples of recent work.

- ***Audit of NRC's Integrated Personnel Security System:*** The Integrated Personnel Security System (IPSS) supports NRC's personnel and facility security programs, such as badge management, classified visit tracking, personnel security tracking, and drug testing management. The objective of this audit was to determine if IPSS met its required operational capabilities. OIG found that IPSS does not perform in accordance with its required operational capabilities. Specifically,

  - The system is not fully functional.
  - System data is inaccurate and missing.
  - System checks to ensure data accuracy and correspondence between related data items are inadequate.
  - Security measures are inadequate or missing.
  - IPSS lacks a records disposition schedule.

  As a result, NRC staff lack IPSS reports to ensure the effectiveness of the security program, must maintain duplicate systems for drug testing and badge management, cannot ensure that reinvestigations are performed in a timely manner, and cannot determine with confidence when and at what cost the system will be fully functional. Furthermore, personnel security information is vulnerable to misuse. System development has gone from $386,850 with an estimated completion of June 2003 to $640,000 and an estimated completion of December 2006. However, given previous complications in fulfilling the system design requirements, there is no assurance that the system will perform satisfactorily even then.

- ***Evaluation of NRC's Use of Probabilistic Rick Assessment (PRA) in Regulating the Commercial Nuclear Power Industry:*** NRC's PRA policy statement reflects a commitment to increasing the use of PRA technology in all regulatory matters to the extent supported by the state of the art in PRA methods and data, and in a manner that complements the NRC's deterministic approach and supports NRC's traditional defense-in-depth philosophy. Unlike

deterministic analysis that is based on applying experience, testing programs and expert judgment, PRA develops a quantitative estimate of risk by evaluating the frequency of initiating events, the conditional probability of the unavailability and the unreliability of systems, structures and components (SSCs) available to mitigate an initiating event, and the reliability of human interaction with SSCs. In addition, PRA extends the deterministic approach by examining multiple failures and unavailability of SSCs. Typically, the results of a PRA are presented as core damage frequency and large early release frequency, the contributors to these estimated results, and the corresponding uncertainties in the estimated results.

The objectives of this evaluation were to determine if NRC is: 1) following prevailing good practices in PRA methods and data in its use of PRA, 2) using prevailing good practices in PRA methods and data appropriately in its regulation of licensees, and 3) achieving the objectives of its PRA policy statement. This evaluation addressed only the NRC's regulation of operating commercial power plants.

Although NRC is employing prevailing good practices in the areas evaluated in this report, the agency lacks formal, documented processes and associated configuration control for its PRA models and software. Specifically:

- NRC's computer models of plant SSCs were not consistently maintained with changes to the as-operated plant, and
- The quality assurance program for the computer software programs used during the PRA process was not documented and the software was not thoroughly tested.

As a result, NRC staff may not come to the correct conclusions regarding the safety of commercial nuclear power plants.

- ***Audit of the Development of the National Source Tracking System:*** NRC regulates medical, academic, and industrial uses of radioactive material generated by or from a nuclear reactor. NRC regulations define this radioactive material as byproduct material. This material may be in the form of a *sealed source*, which is radioactive material sealed in a capsule or closely bonded in solid form. There is widespread use of byproduct material in the United States and abroad for peaceful purposes. However, this material could also be used maliciously in a radioactive dispersal device (dirty bomb). NRC is proposing to build the National Source Tracking System (NSTS), a web-based system that will contain cradle-to-grave information on high-risk sealed sources. This audit focused on the development of that system.

OIG ascertained that, as proposed, NSTS may be inadequate because the supporting analysis is based on unreliable data and does not consider options stated by the International Atomic Energy Agency (IAEA). Specifically, the number of individual sources for the system was estimated at about 3,600; however, the actual number of sources could be as high as 36,000. While the IAEA suggested minimum levels for tracking radioactive sources, it also suggested tracking beyond those levels. However, NRC decided to track only to the minimum level and did not formally consider options beyond the minimum level. In short, a comprehensive regulatory analysis is lacking.

As a result, NRC may not account for all byproduct material that represents a risk to the common defense and security and public health and safety. Such risks could result in economic, psychological, and physical harm to the United States and the public.

- ***Audit of the NRC Byproduct Materials License Application and Review Process***: The terrorist attacks of September 11, 2001, heightened the Nation's concerns that the loss or theft of radioactive (byproduct) material could lead to malicious use in a radiological dispersal device (RDD). An RDD, also known as a dirty bomb, is a conventional explosive that incorporates radioactive material and releases it on detonation. The major purpose of a dirty bomb is to create terror and disruption, not to cause death by radiation.

  OIG conducted this work as part of a larger effort to determine whether NRC's oversight of byproduct material provides reasonable assurance that licensees account for and control the materials. OIG's specific objective for this report was to determine if NRC ensures, through its license application and review process, that only legitimate entities receive NRC byproduct material licenses.

  The review found that NRC officials are not aware of the full spectrum of vulnerabilities in the byproduct material license application and review process. This awareness is lacking because NRC has not looked inwards at its own business and regulatory processes. Specifically, the agency has not conducted vulnerability assessments of all aspects of the materials program, including the license application and review process.

  Consequently, individuals with malevolent intentions could exploit vulnerabilities in the license application and review process to obtain byproduct material for use in a dirty bomb.

*Investigations*

In FY 2006, OIG completed 92 investigations and three Event Inquiries. These investigative efforts focused on violations of law or misconduct by NRC employees and contractors and allegations of irregularities or inadequacies in NRC programs and operations. The following are examples of recent work:

- ***NRC's Handling of Preemption Matter:*** OIG completed a review of concerns that while Section 274 of the Atomic Energy Act mandated that the regulation of byproduct, source, or special nuclear material was the exclusive jurisdiction of the NRC, certain States have established radiation dose release limits for those materials that differ from the release standard set by NRC. However, even though States were regulating NRC licensees in an area preempted by Congress to the Federal Government, NRC did not act proactively to address these encroachments.

  OIG became aware of this issue as a result of a July 2004 application to NRC from the Governor of Minnesota for Agreement State status. During a review of the application for Agreement State status, NRC staff became concerned about a 1992 State of Minnesota Public Utilities Commission order that required an annual radiation dose release limit for dry cask storage at a nuclear plant in the State which conflicted with the NRC dose limit. During OIG review of this matter, OIG found that while it has been the longstanding practice of NRC to not become involved in a potential preemption matter unless an NRC licensee initiates court action, NRC has no written policy regarding how the agency addresses preemption issues.

  In the Atomic Energy Act, Congress intended that regulation of a licensee be exercised by either the NRC Commission or State, but not by both. This intent was echoed by parties interviewed by OIG, including NRC stakeholders and staff, who wanted NRC to more pro-actively involve itself with preemption matters. Those facts, coupled with NRC's criticism of the State of Minnesota during its review of the Agreement State Application for an action taken by the State with NRC's knowledge over 10 years ago indicated the current "hands off" practice of NRC in this area needed review and possible revision. OIG recommended that the NRC Commission direct the staff to review past NRC practices regarding preemption issues and to develop written policy for Commission approval concerning future actions by NRC in the area of State regulation of nuclear power plants.

  Subsequently, the NRC Commission stated their expectation that NRC's Office of the General Counsel (OGC) will lower its threshold for recommending litigation of preemption matters to the Department of Justice. The Commission directed OGC to monitor actions by

States that appear to regulate in areas reserved to the NRC and to bring potential preemption matters to the attention of the Commission.

- ***NRC Oversight of Research Test Reactors:*** OIG conducted an investigation based on information aired in an October 2005 American Broadcasting Company (ABC) television episode of *Primetime.* The program reported that students were easily able to circumvent security measures and gain access to 12 of 13 university nuclear research and test reactor (RTR) facilities licensed by NRC. The *Primetime* program concluded that NRC oversight of the security measures in place at RTRs was inadequate.

  During this investigation, OIG determined that following the events of September 11, 2001, NRC instituted increased security measures at RTRs which were based on the type and quantity of material onsite. Specifically, NRC sent each RTR site-specific Interim Compensatory Measures (ICM) for physical security and requested RTRs to develop implementation plans. NRC continued this oversight by conducting inspections of RTRs' implementation plans for the ICM's to ensure that required security measures have been implemented at each RTR site.

  OIG also determined that NRC staff appropriately addressed the specific incidents of apparent lack of security at RTRs reported in the ABC *Primetime* episode. OIG found that NRC first became aware of suspicious visitors to RTRs in June 2005. After coordination with the Federal Bureau of Investigation, NRC learned that the students were journalism students hired by ABC. Prior to the October 2005 *Primetime* episode, NRC obtained limited footage of the *Primetime* episode and reviewed the apparent security lapses documented by *Primetime*. NRC found one instance that was contrary to RTRs' security plans. NRC found that one of the ABC student reporters momentarily stepped uninvited through a door into the protected area of the RTR while speaking to the RTR operator. Due to this unauthorized access to the facility, the RTR was issued a violation; however, the violation was "non-cited" because the licensee's actions were sufficient to protect public health and safety.

- ***NRC's Oversight of the Force-on-Force Program:*** OIG conducted a Special Inquiry in response to concerns raised by the public and Members of Congress about NRC's approval of the selection of The Wackenhut Corporation (Wackenhut) by the Nuclear Energy Institute (NEI), lobbyist for the nuclear industry, to provide the mock aggressor force during NRC evaluations of the security of commercial nuclear power plants.

  Specifically, as a result of the September 2001 terrorist attacks, NRC conducted an evaluation of the security and safeguards programs of nuclear power plants. As part of this effort, NRC identified the need to improve the offensive abilities and effectiveness of the

mock adversary force. Subsequently, the staff provided the NRC Commission with five alternatives that outlined various processes for the development and implementation of a credible, well-trained, and consistent mock adversary force for Force-on-Force (FOF) exercises. The Commission voted to approve the staff's recommendation which called for NRC staff to establish adversary force standards and guidelines and for the industry to select and train a pool of personnel for a Composite Adversary Force (CAF) that would meet the performance standards established by NRC.

Acting on this decision, NEI selected Wackenhut as the CAF through a competitive contract process. The selection of Wackenhut, a firm that provided security guard services for approximately 50 percent of the nation's nuclear power plants, to also act as an adversary force to test nuclear plant security resulted in concerns of a possible conflict.

The OIG Special Inquiry found that the Commission directed NRC staff to ensure that there would be appropriate management and administrative controls within Wackenhut to provide adequate independence between CAF and nuclear power plant security forces. Consequently, steps were taken by NEI and Wackenhut to address the perception of a conflict. Additionally, NRC staff had measures in place to maintain control of the FOF inspection schedule, plan, and process. Also, OIG found that during FOF exercises, NRC staff (1) evaluated the licensee's ability to defend against the adversary threat; (2) monitored and evaluated the performance of the CAF; and (3) made the final determination regarding FOF test results.

## BUDGET AUTHORITY AND FULL-TIME EQUIVALENTS BY PROGRAM

| Summary | FY 2006 Enacted | FY 2007 President's Budget | FY 2008 Request |
|---|---|---|---|
| **Budget Authority by Program ($K)** | | | |
| Audits | 4,963 | 4,759 | 4,628 |
| Investigations | 3,345 | 3,385 | 3,516 |
| **Total Budget Authority** | 8,308 | 8,144 | 8,144 |
| **Full-Time Equivalent Employment by Program** | | | |
| Audits | 27 | 27 | 29 |
| Investigations | 22 | 22 | 22 |
| **Total FTE** | 49 | 49 | 51 |

## Justification of Program Requests

The work to be performed by OIG during FY 2008 will be carried out through OIG's two major programs, Audits and Investigations. In accordance with OMB requirements, OIG is providing the full cost of these programs for the FY 2008 budget. The FY 2008 budget identifies OIG's management and operational support costs and distributes these costs to the audit and investigative programs as a portion of the full cost of these programs.

The following section presents program resource tables and descriptions of the requested resources, the associated efforts within each program, as well as the goals and measures for each program. The costs for management and operational support are included at the end of this chapter.

## AUDITS

| Summary | FY 2006 Enacted | FY 2007 President's Budget | FY 2008 Request |
|---|---|---|---|
| **Budget Authority by Function ($K)** | | | |
| Salaries and Benefits | 3,629 | 3,769 | 4,209 |
| Contract Support and Travel | 1,334 | 990 | 419 |
| **Total Budget Authority** | 4,963 | 4,759 | 4,628 |
| **FTE** | 27 | 27 | 29 |

For FY 2008, OIG requests $4.628 million and 29 FTE to carry out its audit program activities. With these resources, OIG will conduct approximately 26 to 28 audits and evaluations that will focus on agency programs involving the major management challenges and risk areas facing the NRC. This funding will sustain the existing program and add two FTE to the audit staff. These additional resources will enable OIG to provide effective audit coverage of new reactor licensing.

- During the next few years, NRC faces the first round of new reactor license applications in 28 years. The agency has not received a new reactor license application since 1978. In addition, these new applications involve new reactor design technologies and a new licensing process (combined operating license). NRC estimates that it will receive 20 or more new applications in the coming years, and believes that upward of 300 new staff positions will be needed to meet this demand.

- Coinciding with the dramatic increase in regulatory responsibilities associated with these licensing actions, many senior staff will be retiring. These staff members have significant experience licensing reactors from the 1960s, 1970s, and 1980s. NRC's ability to effectively review and license the new generation of commercial nuclear reactors will depend significantly on how well employees that are new to the process are trained and developed. Effective reviewers and regulators at the staff and senior management level will be a necessity for the agency.

- This review of new applications involving new reactor technologies, a new licensing process, and new untested staff necessitates strong control processes to ensure that the agency meets its review and licensing objectives. Therefore, increased OIG oversight will assist NRC in building a strong regulatory program. By being an independent observer and evaluator, OIG will provide valuable insights that NRC can adopt at an early stage.

## FY 2007–FY 2008 Audit Performance Goals

OIG audits planned for FY 2007–FY 2008 will link directly to the OIG Strategic Plan and its associated general goals and strategies. Each year, OIG develops a comprehensive annual audit plan that includes input from various elements of the NRC, Congress, other Federal agencies, the nuclear industry, and OIG staff. This plan also identifies the specific program areas and key priorities, strategies, and activities on which OIG audit resources will focus during the fiscal year. OIG plans audits to encourage efficiency, economy, and effectiveness in NRC's critical risk programs and operations; improve program activities at headquarters and regional offices, and respond to unplanned priority requests and emerging issues.

The requested resources for the audit program will support OIG efforts to focus on identifying risk areas and management challenges relating to the improvement of NRC's safety, security, and/or corporate management programs. To measure its success, the OIG audit program has established the following FY 2008 performance goals.

- Identify risk areas or management challenges relating to the improvement of NRC's safety programs for 80 percent of OIG audit products or activities undertaken involving these programs during the fiscal year.

- Identify risk areas or management challenges relating to the improvement of NRC's security programs for 80 percent of OIG audit products or activities undertaken involving these programs during the fiscal year.

- Identify risk areas or management challenges relating to NRC's corporate management programs for 80 percent of OIG audit products or activities undertaken involving these programs during the fiscal year.

- Have a high impact on improving NRC's safety, security, and/or corporate management programs for 70 percent of OIG audit products or activities completed during the fiscal year.

- Obtain agency agreement on at least 90 percent of OIG audit recommendations.

- Obtain final agency action on an aggregate of 65 percent of OIG audit recommendations within one year.

## INVESTIGATIONS

| Summary | FY 2006 Enacted | FY 2007 President's Budget | FY 2008 Request |
|---|---|---|---|
| **Budget Authority by Function ($K)** | | | |
| Salaries and Benefits | 2,992 | 3,070 | 3,217 |
| Contract Support and Travel | 353 | 315 | 299 |
| **Total Budget Authority** | 3,345 | 3,385 | 3,516 |
| **FTE** | 22 | 22 | 22 |

For FY 2008, OIG requests $3.516 million and 22 FTE to carry out its investigative program activities. With these resources, OIG will conduct 70–90 investigations and Event Inquiries covering a broad range of misconduct and mismanagement affecting various NRC programs. OIG will also continue its regional liaison activities to facilitate closer coordination between OIG and NRC's regional offices. OIG will also continue to conduct fraud awareness briefings and participate in projects or task forces that strengthen agency operations. In addition, OIG will continue working with the NRC staff to increase their awareness of the vulnerabilities associated with computer intrusion involving unauthorized access to the agency's operating systems.

Proactive investigations are also conducted when indications are raised concerning potentially systematic violations such as theft of Government property or contract fraud. In addition, OIG periodically conducts Event Inquiries that identify staff actions that may have contributed to the occurrence of an event.

### FY 2007–FY 2008 Investigative Performance Goals

The OIG investigative program for FY 2007 – FY 2008 will include investigative activities related to the integrity of the NRC's programs and operations. OIG routinely receives and investigates allegations concerning violations of Federal laws and regulations, as well as allegations of mismanagement, waste, or staff misconduct that could adversely affect public health and safety. In addition, OIG routinely undertakes proactive investigations directed at particular areas of agency programs that have a high potential for fraud, waste, and abuse. On a priority basis, investigative program products and activities will be directed to address allegations in the safety, security, and corporate management mission-related areas articulated in the OIG Strategic Plan.

The requested resources for the investigative program will support OIG efforts to focus on identifying risk areas or management challenges relating to the improvement of NRC's safety, security, and/or corporate management programs. To measure success, the OIG investigative program has established the following FY 2008 performance goals:

- Identify risk areas or management challenges relating to the improvement of NRC's safety programs for 85 percent of OIG investigations and activities undertaken involving these programs during the fiscal year.

- Identify risk areas or management challenges relating to the improvement of NRC's security programs for 90 percent of OIG investigations and activities undertaken involving these programs during the fiscal year.

- Identify risk areas or management challenges relating to the improvement of NRC's corporate management programs for 60 percent of OIG investigations and activities undertaken involving these programs during the fiscal year.

- Have a high impact on improving NRC's safety, security, and/or corporate management programs for 70 percent of OIG investigations or activities completed during the fiscal year.

- Obtain 90 percent agency action in response to OIG investigative reports provided to the agency.

- Obtain 70 percent acceptance by NRC's Office of the General Counsel of OIG-referred Program Fraud and Civil Remedies Act cases.

Following is a description of the linkage between OIG's Strategic Plan goals and its Performance Plan for FY 2007–FY 2008.

**Linkage Between OIG's Strategic Plan Goals and OIG's Performance Plan for FY 2007 – FY 2008**

OIG Strategic Plan for FY 2003 – FY 2008 and associated performance goals present a results-based business case and return-on-investment. The plan serves to strengthen OIG by establishing a shared set of expectations for OIG's stakeholders regarding the goals it expects to achieve and the strategies and actions that it will use to do so. OIG will adjust the plan as circumstances necessitate, use it to develop our annual plan and budget submission, report on progress in OIG's semiannual reports, and hold OIG managers and staff accountable for achieving the goals and outcomes.

OIG's strategic plan includes three strategic goals and six general goals with a number of supporting strategies and actions that describe planned accomplishments over the strategic planning period. Through associated annual planning activities, audit and investigative resources will focus on assessing NRC's safety, security, and corporate management programs involving the major challenges and risk areas facing the NRC in the given budget year. The work of OIG auditors and investigators support and complement each other in the pursuit of these objectives.

Following is a discussion of how the three strategic goals and six general goals of the OIG Strategic Plan link with the FY 2007 – FY 2008 Performance Plan. This includes a tie-in between the level of activity by the OIG in its audit and investigation functions and the strategies and actions related to the strategic and general goals. It also includes the performance goals for FY 2007 and FY 2008.

## Goals and Strategies

| **STRATEGIC GOAL 1: Advance NRC's Efforts to Enhance Safety and Protect the Environment.** | |
|---|---|
| **General Goals** | |
| **1.** | **80% of OIG products and activities undertaken to accomplish Strategic Goal 1 will identify risk areas or management challenges related to enhancing safety.** |
| **2.** | **70% of OIG products and activities undertaken to accomplish Strategic Goal 1 will have a high impact on improving safety.** |

**Discussion:** NRC faces many safety challenges and an associated increasing workload concerning nuclear reactor oversight, the regulation of nuclear materials, and the handling of high-level waste.

A significant focus for NRC is ensuring the safe operation of the Nation's operating nuclear power plants through an established oversight process developed to ensure that licensees identify and resolve safety issues before they affect safe plant operation.

In addition, NRC needs to address an increasing number of license amendment requests to increase the power generating capacity of specific commercial reactors; license renewal requests to extend reactor operations beyond originally set expiration dates; the introduction of new technology such as new and advanced reactor designs; and the construction of new nuclear power plants.

In fulfilling its responsibilities to regulate nuclear materials, NRC must ensure that its regulatory activities regarding nuclear fuel cycle facilities and nuclear materials adequately protect public health and safety. NRC is especially reliant on the effectiveness of the Agreement States program in meeting these responsibilities. Additionally, NRC's regulatory activities concerning nuclear materials must protect against radiological sabotage and theft or diversion of the materials. Licensing of new facilities (e.g., uranium enrichment and mixed oxide [MOX] fuel fabrication) pose additional challenges.

In the high-level waste area, NRC will face significant issues involving the licensing of the Yucca Mountain repository and the transportation of designated high-level waste from plants and facilities. Additional high-level waste issues include the interim storage of spent nuclear fuel both at and away from reactor sites, certification of storage and transport casks, and the oversight of the decommissioning of reactors and other nuclear sites. In response to these agency challenges, OIG is implementing the following strategies and actions over the five year strategic planning period:

**Strategy 1-1: Identify risk areas associated with NRC efforts to implement the Reactor Oversight and Incident Response Program and make recommendations, as warranted, for addressing them.**

Actions:

a. Assess the adequacy of NRC's implementation of licensing and other oversight activities with regard to the safe operation of existing nuclear reactors.
b. Assess the extent to which NRC has integrated into the reactor oversight process its emergency preparedness and incident response obligations associated with a potential significant nuclear event or incident.
c. Assess NRC's implementation of its risk-informed inspection process.
d. Assess the impact that an increase in license renewal requests would have on the licensing process.
e. Assess the effectiveness of NRC regulatory process and related enforcement actions.
f. Assess NRC's actions to address the potential risks associated with aging facilities and the introduction of new technology.
g. Monitor NRC activities and gather stakeholder information to identify potential gaps in NRC regulatory oversight. Conduct, as appropriate, Event Inquiries when gaps are identified.

**Strategy 1-2: Identify risk areas facing the materials program and make recommendations, as warranted, for addressing them.**

Actions:

a. Assess NRC's implementation of programs for controlling, accounting for, tracking, and inspecting nuclear materials.
b. Assess the extent to which NRC has integrated into the materials program its emergency preparedness and incident response obligations associated with a potential significant nuclear event or incident.
c. Assess NRC activities concerning the licensing and oversight of fuel cycle facilities, including MOX fuel fabrication and the potential oversight of DOE non-weapons laboratories.

d. Assess NRC's handling of low-level waste issues, including security, disposal, and coordination with Agreement States.
e. Assess impact of Agreement States program on the safety and security of materials and on NRC funding and regulatory activities.
f. Review NRC and licensee reports and engage interested stakeholders to identify issues of concern in NRC oversight of nuclear material held by NRC licensees.
g. Assess NRC's oversight of the nuclear waste issues associated with the decommissioning and cleanup of nuclear reactor sites and other facilities.

**Strategy 1-3: Identify risk areas associated with the prospective licensing of the high-level waste repository and make recommendations, as warranted, for addressing them.**

Actions:
a. Assess NRC's regulatory activities involving the interim storage of high-level waste and spent fuel both at and away from reactor sites.
b. Assess issues involving the review of a Yucca Mountain repository application, if received by NRC, and the transportation of designated high-level waste from plants and facilities.
c. Assess the consequences of Yucca Mountain not being licensed or not being available as planned, including NRC's ability to respond to DOE and industry contingency plans.
d. Closely monitor the Yucca Mountain license review process to ensure that there are no indications of process deviations and that the review is being conducted in a thorough and impartial manner.

| **STRATEGIC GOAL 2: Enhance NRC's Efforts to Increase Security in Response to the Current Threat Environment.** |
|---|
| **General Goals**<br>**1. 85% of OIG products and activities undertaken to accomplish Strategic Goal 2 will identify risk areas or management challenges related to security.**<br>**2. 70% of OIG products and activities undertaken to accomplish Strategic Goal 2 will have a high impact on improving security.** |

**Discussion:** Terrorist attacks have resulted in a sharpened focus on the security and protection of operating nuclear power plants and nuclear materials. NRC, in concert with other agencies, must continuously assess the risks faced by licensed activities, review existing security measures, and identify vulnerabilities. Similarly, continuous risk and vulnerability assessments must be conducted on NRC office facilities. Given this increased security focus, it is anticipated that NRC will expend considerable effort in developing responsive security plans and enhanced security capabilities.

NRC also faces new challenges in supporting U.S. international interests in the safe and secure use of nuclear materials and in nuclear nonproliferation. These challenges include improving controls on the export of nuclear materials and equipment and NRC's successful exercising of its international commitments.

In response to these agency challenges, OIG is implementing the following strategies and actions over the five year strategic planning period:

**Strategy 2-1: Identify risk areas involved in effectively securing operating nuclear power plants and nuclear materials and make recommendations, as warranted, for addressing them.**

Actions:

a. Assess the extent to which NRC has developed a comprehensive threat assessment with regard to nuclear power plants and nuclear materials and a process for keeping it up to date.
b. Assess the adequacy of the process for developing existing regulations to respond to an evolving threat environment and the extent to which NRC is making appropriate regulatory adjustments.
c. Assess NRC's coordination with other agencies.
d. Assess NRC's acquisition of resources and expertise to meet its security responsibilities.
e. Monitor the development of NRC requirements intended to enhance nuclear plant security.

**Strategy 2-2: Identify risks associated with nonproliferation and make recommendations, as warranted, for addressing them.**

Actions:

a. Assess NRC's efforts to improve controls on the export of nuclear materials or equipment.
b. Assess NRC's responsibilities linked to established statutes, international treaties, conventions, and agreements of cooperation.

**Strategy 2-3: Identify threats to NRC security and make recommendations, as warranted, for addressing them.**

Actions:

a. Assess the extent to which NRC has developed a comprehensive threat assessment for its facilities and personnel and a process for keeping it up to date.
b. Assess the extent to which NRC has implemented physical and information security controls and procedures.

c. Assess the effectiveness of NRC approaches for balancing physical and information security and public openness.
d. Assess NRC steps in ensuring continuity of its operations in the event that a significant incident occurs.
e. Assess other issues involving NRC security, including regional vulnerabilities and temporary facilities needed for Yucca Mountain hearings.
f. Through proactive initiatives and reactive investigations, assist the NRC's Office of Information Services and NRC systems administrators in the protection of NRC information technology infrastructure against internal and external computer intrusions.

| **STRATEGIC GOAL 3: Improve the Economy, Efficiency, and Effectiveness of NRC Corporate Management.** |
|---|
| **General Goals**<br>**1. 65% of OIG products and activities undertaken to accomplish Strategic Goal 3 will identify critical risk areas or management challenges related to corporate management.**<br>**2. 70% of OIG products and activities undertaken to accomplish Strategic Goal 3 will have a high impact on corporate management.** |

**Discussion:** NRC faces significant challenges to efficiently, effectively, and economically manage its resources. In the OIG's assessment of the most serious management challenges facing the NRC, the OIG identified three specific challenges that have the potential for a perennial weakness or vulnerability that, without substantial management attention, would seriously impact agency operations or strategic goals. The OIG identified:

- Implementation of information resources,
- Administration of all aspects of financial management, and
- Managing human capital.

These management challenges dovetail with the President's Management Agenda, which NRC is striving to implement. The President's Management Agenda is an aggressive strategy for improving the management and performance of the Federal Government. It focuses on apparent deficiencies where the Government could make improvements and the most progress in the areas of:

- Strategic management of human capital,
- Competitive sourcing,
- Improved financial performance,
- Expanded electronic government, and
- Budget and performance integration.

In response to these agency challenges, OIG is implementing the following strategies and actions

over the five year strategic planning period.

**Strategy 3-1: Assess progress made in implementing the President's Management Agenda.**

Actions:

a. Assess NRC strategies for addressing loss of knowledge, skills, and abilities through retirement and turnover and the impact of a diminishing "academic pipeline."
b. Assess NRC efforts to comply with OMB competitive sourcing requirements.
c. Assess steps taken by NRC to improve its financial management practices, including the overall process and steps undertaken to implement cost accounting capabilities and integrate financial systems.
d. Assess NRC efforts to embrace e-Government initiatives.
e. Assess NRC progress in integrating budget and performance.

**Strategy 3-2: Identify other areas of corporate management risk within NRC and make recommendations, as warranted, for addressing them.**

Actions:

a. Assess NRC property accountability and controls.
b. Assess NRC facilities management operations.
c. Assess NRC actions taken to address issues cited in the NRC safety culture and climate survey.
d. Assess NRC IT issues, including the return-on-investment obtained from IT initiatives, integration of NRC technology and systems, and NRC procedures for IT life cycle management.
e. Assess NRC acquisition and contracting controls and processes.
f. Coordinate with NRC's Office of the Chief Financial Officer and the Office of Information Services to identify any instances of misuse of NRC equipment and resources, such as computers, and travel and procurement credit cards.
g. Reduce instances of employee criminal and administrative misconduct through investigations and proactive initiatives.
h. Use proactive initiatives, in support of improved financial performance, to identify and investigate any instances of fraudulent payments associated with NRC programs.

## PERFORMANCE MEASURES

| Strategic Goal 1: Advance NRC's Efforts to Enhance Safety and Protect the Environment | | | | | |
|---|---|---|---|---|---|
| | **Baseline 2004** | **2005** | **2006** | **2007** | **2008** |
| **Measure 1**. Percent of OIG products/activities[20] undertaken to identify risk areas or management challenges[21] relating to the improvement of NRC's safety program. | | | | | |
| **Target** | | 80% | 80% | 80% | 80% |
| **Actual** | 100% | 100% | 100% | | |
| **Measure 2**. Percent of OIG products/activities that have a high impact[22] on improving NRC's safety program. | | | | | |
| **Target** | | 70% | 70% | 70% | 70% |
| **Actual** | 100% | 100% | 100% | | |
| **Measure 3**. Number of audit recommendations agreed to by agency. | | | | | |
| **Target** | | 90% | 90% | 90% | 90% |
| **Actual** | 100% | 100% | 81%[23] | | |
| **Measure 4**. Final agency action within one year on audit recommendations. | | | | | |
| **Target** | | 50% | 50% | 50% | 50% |
| **Actual** | 7% | 35%[24] | 63% | | |
| **Measure 5**. Agency action in response to investigative reports. | | | | | |
| **Target** | | 90% | 90% | 90% | 90% |
| **Actual** | 100% | 100% | 100% | | |

| Strategic Goal 2: Enhance NRC's Efforts to Increase Security in Response to the Current Threat Environment | | | | | |
|---|---|---|---|---|---|
| | **Baseline 2004** | **2005** | **2006** | **2007** | **2008** |
| **Measure 1**. Percent of OIG products/activities undertaken to identify risk areas or management challenges relating to the improvement of NRC's security program. | | | | | |
| **Target** | | 85% | 85% | 85% | 85% |
| **Actual** | 100% | 100% | 100% | | |
| **Measure 2**. Percent of OIG products/activities that have a high impact on improving NRC's security program. | | | | | |
| **Target** | | 70% | 70% | 70% | 70% |
| **Actual** | 100% | 100% | 100% | | |
| **Measure 3**. Number of audit recommendations agreed to by agency. | | | | | |
| **Target** | | 90% | 90% | 90% | 90% |
| **Actual** | 100% | 100% | 100% | | |
| **Measure 4**. Final agency action within one year on audit recommendations. | | | | | |
| **Target** | | 65% | 65% | 65% | 65% |
| **Actual** | 89% | 60%[25] | 25%[26] | | |
| **Measure 5**. Agency action in response to investigative reports. | | | | | |
| **Target** | | 90% | 90% | 90% | 90% |
| **Actual** | 100% | 100% | 100% | | |

| Strategic Goal 3: Improve the Economy, Efficiency, and Effectiveness of NRC Corporate Management | | | | | |
|---|---|---|---|---|---|
| | **Baseline 2004** | **2005** | **2006** | **2007** | **2008** |
| **Measure 1**. Percent of OIG products/activities undertaken to identify risk areas or management challenges relating to the improvement of NRC's corporate management program. | | | | | |
| **Target** | | 65% | 65% | 65% | 65% |
| **Actual** | 98% | 100% | 99% | | |
| **Measure 2**. Percent of OIG products/activities that have a high impact on improving NRC's corporate management program. | | | | | |
| **Target** | | 70% | 70% | 70% | 70% |
| **Actual** | 89% | 85.7% | 96% | | |
| **Measure 3**. Number of audit recommendations agreed to by agency. | | | | | |
| **Target** | | 90% | 90% | 90% | 90% |
| **Actual** | 100% | 100% | 100% | | |
| **Measure 4**. Final agency action within one year on audit recommendations. | | | | | |
| **Target** | | 65% | 65% | 65% | 65% |
| **Actual** | 81% | 85% | 60%[27] | | |
| **Measure 5**. Agency action in response to investigative reports. | | | | | |
| **Target** | | 90% | 90% | 90% | 90% |
| **Actual** | 100% | 100% | 100% | | |
| **Measure 6**. Acceptance by NRC's Office of the General Counsel of OIG-referred Program Fraud and Civil Remedies Act cases. | | | | | |
| **Target** | | 70% | 70% | 70% | 70% |
| **Actual** | Zero cases | 100% | 100% | | |

## Verification and Validation of Measured Values and Performance

OIG uses an automated management and information system (MIS) to capture program performance data for audits and investigations. The integrity of the MIS was thoroughly tested and validated prior to implementation. Reports generated by the system provide both detailed information and summary data. Beginning with FY 2006, both the audit and investigative program statistics were fully integrated into the new system and was used to compile its statistical performance data. All system data is deemed reliable.

## Crosscutting Functions With Other Government Agencies

The NRC's OIG has a crosscutting function relating to its investigatory case referrals to the Department of Justice and other State and local law enforcement entities.

### FY 2008 Office of the Inspector General Budget Resources Linked to Strategic and General Goals

The following table depicts the relationship of the Inspector General program and associated resource requirements to its strategic and general goals.

| Program Links to Strategic and General Goals ($K) | OIG Strategic and General Goals | | |
|---|---|---|---|
| | Advance NRC's Safety Efforts ($K) | Enhance NRC's Security Efforts ($K) | Improve NRC's Corporate Management ($K) |
| **FY 2008 Programs ($8,144; 51 FTE)** | | | |
| Audits ($4,628; 29 FTE) | $2,102<br>14.0 FTE | $1,041<br>6.5 FTE | $1,485<br>8.5 FTE |
| Investigations ($3,516; 22 FTE) | $390<br>2.5 FTE | $390<br>2.5 FTE | $2,736<br>17 FTE |

Following is a discussion of the OIG Management and Operational Support activities.

### *Management and Operational Support*

The Inspector General's Management and Operational Support staff consists of senior executive managers, the general counsel, and an administrative support staff. OIG's senior executive managers will provide the continued vision, strategic direction, and guidance regarding the conduct and supervision of audits and investigations. Senior management will also ensure accountability regarding OIG's established goals and strategies and achievement of intended results. Further, senior management will ensure a diverse workforce with the proper focus on the President's Management Agenda.

In furtherance of OIG's mission to promote economy and efficiency, and to prevent fraud, waste, and abuse in agency programs and operations, OIG's general counsel, in coordination with cognizant OIG staff, will conduct analyses of existing and proposed legislation, regulations, directives, and policy issues. These objective analyses will result in timely written commentaries to the agency that prospectively identify and prevent potential problems.

The administrative support staff will support OIG programs by providing independent personnel services, information technology and information management support, financial management, policy and strategic planning support, training coordination, and the publication of the OIG's Semi-annual Report to Congress in accordance with the requirements of the IG Act.

To carry out the functions of this program in FY 2008, OIG estimates that its costs will be $1.312 million, which includes salaries and benefits for eight FTE. The tables below provide a breakdown of the FY 2008 budget estimates for Management and Operational Support by program and a cost comparison by function.

## ALLOCATION OF SUPPORT COSTS TO OIG PROGRAMS

| Management and Operational Support Allocation by Program ($K) | FY 2008 FTE | FY 2008 Salaries and Benefits | FY 2008 Contract and Support |
|---|---|---|---|
| Audits | 4 | 585 | 82 |
| Investigations | 4 | 585 | 60 |
| **Total** | 8 | $1,170 | $142 |

## COMPARATIVE COSTS OF MANAGEMENT AND OPERATIONAL SUPPORT

| Summary | FY 2006 Enacted | FY 2007 President's Budget | FY 2008 Estimate Request[28] |
|---|---|---|---|
| **Budget Authority by Function ($K)** | | | |
| Salaries and Benefits | 1,090 | 1,117 | 1,170 |
| Contract Support and Travel | 217 | 168 | 142 |
| **Total Budget Authority** | 1,307 | 1,285 | 1,312 |
| **FTE** | 8 | 8 | 8 |

## APPENDIX I: BUDGET AUTHORITY BY FUNCTION

### BUDGET AUTHORITY BY FUNCTION
(Dollars in Thousands)

| NRC Appropriation | FY 2006 Enacted | FY 2007 President's Budget | FY 2008 Request |
|---|---|---|---|
| **Salaries and Expenses (S&E)** | | | |
| Salaries and Benefits | 434,066 | 442,555 | 485,401 |
| Contract Support | 278,396 | 305,992 | 400,272 |
| Travel | 20,742 | 19,863 | 22,736 |
| **Total (S&E)** | **733,204** | **768,410** | **908,409** |
| **Office of the Inspector General (OIG)** | | | |
| Salaries and Benefits | 6,621 | 6,839 | 7,426 |
| Contract Support | 1,377 | 1,035 | 448 |
| Travel | 310 | 270 | 270 |
| **Total (OIG)** | **8,308** | **8,144** | **8,144** |
| **Total NRC Appropriation** | | | |
| Salaries and Benefits | 440,687 | 449,394 | 492,827 |
| Contract Support | 279,773 | 307,027 | 400,720 |
| Travel | 21,052 | 20,133 | 23,006 |
| **Total (NRC)** | **741,512** | **776,554** | **916,553** |

## HOMELAND SECURITY
(Dollars in Thousands)

| | FY 2006 Enacted | FY 2007 President's Budget | FY 2008 Request |
|---|---|---|---|
| **Budget Authority by Major Programs** | | | |
| Nuclear Reactor Safety | | | |
| New Reactor | 0 | 575 | 2,526 |
| Reactor Licensing and Rulemaking | 28,142 | 20,206 | 15,082 |
| Reactor Oversight and Incident Response | 18,870 | 20,754 | 21,564 |
| **Subtotal - Nuclear Reactor Safety** | **47,012** | **41,535** | **39,172** |
| Nuclear Materials and Waste Safety | | | |
| Fuel Facilities | 9,481 | 10,333 | 8,219 |
| Nuclear Materials Users | 19,162 | 15,185 | 13,455 |
| High-Level Waste Repository | 211 | 242 | 95 |
| Decommissioning and Low-Level Waste | 189 | 228 | 162 |
| Spent Fuel Storage and Transportation | 3,256 | 3,947 | 3,749 |
| Subtotal - Nuclear Materials and Waste Safety | 32,299 | 29,935 | 25,680 |
| **Total** | **79,311** | **71,470** | **64,852** |

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## EXPLANATION OF THE FULL COST BUDGET ALLOCATION

The FY 2008 Performance Budget identifies the infrastructure and support costs for the NRC and distributes them to programs as a portion of the total program cost. The allocation methodology is consistent with the methodology used for preparing the agency's financial statements.

The agency's infrastructure and support involve activities that are necessary for the staff and agency programs to achieve goals and are more efficiently and effectively performed centrally. These activities include space rental and facilities management, physical and personnel security, administrative support services, acquisition of goods and services, human resources management, training and development, matters involving small and disadvantaged businesses and civil rights, information resources management, planning and budget analysis, accounting and finance, and policy support services to the Commission and program area staff in performing their regulatory mission activities and achieving their performance goals. The following table provides a breakdown of the costs of infrastructure and support by program.

### INFRASTRUCTURE AND SUPPORT ALLOCATION BY PROGRAM
### (Dollars in Thousands)

| Program | FY 2006 Enacted | | FY 2007 President's Budget | | FY 2008 Request | |
|---|---|---|---|---|---|---|
| | FTE | Allocation ($) | FTE | Allocation ($) | FTE | Allocation ($) |
| **Nuclear Reactor Safety** | | | | | | |
| New Reactor | 43 | 13,556 | 62 | 22,158 | 111 | 41,386 |
| Reactor Licensing and Rulemaking | 191 | 67,935 | 197 | 71,448 | 185 | 75,195 |
| Reactor Oversight and Incident Response | 213 | 68,494 | 208 | 77,009 | 220 | 94,083 |
| **Subtotal Nuclear Reactor Safety** | **447** | **149,985** | **467** | **170,615** | **516** | **210,664** |
| **Nuclear Materials and Waste Safety** | | | | | | |
| Fuel Facilities | 39 | 12,608 | 35 | 13,096 | 29 | 13,225 |
| Nuclear Materials Users | 70 | 23,823 | 65 | 26,712 | 60 | 24,696 |
| High-Level Waste Repository | 24 | 6,237 | 24 | 6,989 | 29 | 10,282 |
| Decommissioning and Low-Level Waste | 20 | 7,787 | 23 | 8,654 | 23 | 9,086 |
| Spent Fuel Storage and Transportation | 23 | 7,262 | 23 | 8,410 | 23 | 10,663 |
| **Subtotal Nuclear Materials and Waste Safety** | **176** | **57,717** | **170** | **63,861** | **164** | **67,952** |
| **Total Infrastructure and Support Allocation** | **623** | **207,702** | **637** | **234,476** | **680** | **278,616** |

## BUDGET AUTHORITY AND FULL-TIME EQUIVALENTS BY FUNCTION
## (Dollars in Thousands)

| Summary | FY 2006 Enacted | FY 2007 President's Budget | FY 2008 Request |
|---|---|---|---|
| **Budget Authority by Function ($)** | | | |
| Administration, Rent, and Human Resources | 79,343 | 96,093 | 115,898 |
| Information Technology and Information Management | 69,424 | 76,195 | 91,273 |
| Financial Management | 20,820 | 22,957 | 28,570 |
| Policy Support | 23,722 | 23,842 | 25,878 |
| Permanent Change of Station | 14,393 | 15,388 | 16,997 |
| **Total Budget Authority** | **207,702** | **234,475** | **278,616** |
| **Full-Time Equivalent Employment by Function** | | | |
| Administration, Rent, and Human Resources | 174 | 199 | 211 |
| Information Technology and Information Management | 192 | 183 | 196 |
| Financial Management | 105 | 106 | 114 |
| Policy Support | 151 | 148 | 158 |
| Permanent Change of Station | 1 | 1 | 1 |
| **Total FTE** | **623** | **637** | **680** |

## Justification of Costs by Function

Infrastructure and support comprise five functions. The following sections highlight significant changes from FY 2007 resources and discuss major activities for FY 2008.

### *Administration, Rent, and Human Resources*

Resources increase for space and infrastructure support for planned agency growth at headquarters and for additional contract management responsibilities related to New Reactor sub-program activities. Resources also increase for the Governmentwide FY 2008 pay raise and other nondiscretionary compensation and benefits increases, as well as for cost escalation in contracts and rent of existing space. Resources of $4.8 million in FY 2008 one-time new reactor costs were realigned directly to the New Reactor sub-program before the full costs

allocation. These one-time administration costs include design and construction of new facilities; office and systems furniture; and X-ray machines, metal detectors and card readers. Specifically, the budget provides resources for the following:

- growth at headquarters in the number of full-time equivalent (FTE) staff and related rent for additional space, systems and office furniture, build-out of space, transit subsidies, supplies, security equipment, security investigations, and guard services for the additional space.

- modernization of security information systems, the Integrated Personnel Security System and the Headquarters Access Control System, including resources to procure and begin implementation of the Homeland Security Presidential Directive 12 compliant system for physical and logical access control.

- strategic workforce planning, increased recruitment activity, and internal training and professional development programs.

- additional workload stemming from requirements under Title VI (including Executive Order 13166, "Improving Access to Services for Persons with Limited English Proficiency") and Title IX of the Civil Rights Act and for supporting diversity planning and strategy formulation, as well as the agency's program for minority-serving higher education institutions.

- grants, loans, cooperative agreements, contracts, and equipment to institutions of higher education to support nuclear safety, security, or environmental protection programs based on the provision included in the Energy Policy Act of 2005.

*Output Measures.* The requested resources will support agency efforts to achieve the output targets noted in the following tables and included in Chapter 5. The tables provide historical performance, as applicable, on the measures from FY 2003.

## APPENDIX III: EXPLANATION OF THE FULL COST BUDGET ALLOCATION

Output Measure: OMB Directed Acquisition Reform Initiative Measure. Percent of eligible service contracting dollars (contracts over $25,000) that use performance-based contracting techniques during the fiscal year.

| | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 |
|---|---|---|---|---|---|---|
| Target: | New Measure in FY 2005 | | Not less than 40% | Not less than 40% | Not less than 40% | Not less than 40% |
| Actual: | | | 72% | 67% | | |

This measure supports Management Goal, performance measure number 2.

Output Measure: OMB Directed Acquisition Reform Initiative Measure. Percent of required synopses for acquisitions that are posted on the government-wide point-of-entry website (www.FedBizOpps.gov) during the fiscal year. Synopses for acquisitions are those valued at over $25,000 for which widespread notice is required including all associated solicitations except for acquisitions covered by an exemption in the Federal Acquisition Regulations.

| | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 |
|---|---|---|---|---|---|---|
| Target: | 100% of all required synopses. | 100% of all required synopses. | 100% of all required synopses. | 100% of all required synopses. | 100% of all required synopses. | 95% of all required synopses. |
| Actual: | 100% | 100% | 100% | 98% | | |

This measure supports Management Goal, performance measure number 2.

Output Measure: OMB Directed Acquisition Reform Initiative Measure. Competitive Sourcing FY 2004. Number of business case analyses performed on commercial activities listed on the approved FAIR Act inventory and conducted in accordance with Agency competitive sourcing plan. (Measure Revised in FY 2004.)

| | FY 2003 | FY 2004 | FY 2005 | FY 2006 | FY 2007 | FY 2008 |
|---|---|---|---|---|---|---|
| Target: | New measure in FY 2004. | New measure in FY 2004. | 3 business case analyses. | 3 business case analyses. | 3 business case analyses. | 3 business case analyses. |
| Actual: | N/A | N/A | 3 | 3 | | |

This measure supports Management Goal, performance measure number 2.

## APPENDIX III: EXPLANATION OF THE FULL COST BUDGET ALLOCATION

| Output Measure: Diversity of agency workforce groups is equivalent to the relevant civilian labor force. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | Workforce groups are no more than 25% under-represented in occupations relevant to NRC. | Workforce groups are no more than 25% under-represented in occupations relevant to NRC. | NRC's minority workforce compares favorably (within 25%) with relevant National labor market occupational data. | The NRC scores equal to, or greater than, the aggregate federal agency mean on relevant Federal Human Capital Survey questions on work environment and valuing diversity. | Measure deleted after FY 2006. | |
| Actual: | < 25% | < 25% | No group is more than 18% under-represented. | The data to track to this measures was not obtainable. As a result, this measure was not implemented. This measure is being deleted. | | |
| This measure supports Management goal, performance measure number 2. | | | | | | |

| Output Measure: Satisfaction with NRC worklife services is equivalent to the comparable Federal labor force. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | New Measure in FY 2005 | | The NRC scores equal to, or greater than, the aggregate federal agency mean on relevant Federal Human Capital Survey questions on Work-life Services. | The NRC scores equal to, or greater than, the aggregate federal agency mean on relevant Federal Human Capital Survey questions on Work-life Services (survey administered in CY 2006; survey data available in FY 2007). | Measure deleted after FY 2006. | |
| Actual: | | | Survey will be administered in CY 2006; survey data available in FY 2007. | The data to track to this measures was not obtainable. As a result, this measure was not implemented. This measure is being deleted. | | |
| This measure supports Management Goal, performance measure number 2. | | | | | | |

## APPENDIX III: EXPLANATION OF THE FULL COST BUDGET ALLOCATION

### *FY 2006 Significant Accomplishments*

Development of a Minority Serving Institution Program

As a result of the Energy Policy Act, the Office of Small Business and Civil Rights developed a Minority Serving Institution Program directed at Historically Black Colleges and Universities, Hispanic-Serving Institutions, and Tribal Colleges and Universities. The program will be fully implemented during FY 2007.

Small Business Program Accomplishments

The Small Business Program helped to facilitate the award of a significant contract in the Office of Information Services to a small business. As a result of the overall efforts of the Small Business Program and NRC offices, the agency received the Gold Star Award from the Small Business Administration. The agency conducted its first mentoring awards program to recognize mentors and small business awards programs to recognize offices that contributed to the success of the Small Business Program in meeting its goals.

Strategic Workforce Planning Process

The Office of Personnel Management continues to cite the NRC's strategic workforce planning process and related web-based application as an exemplary model for other Federal agencies. As a result, the NRC has received numerous requests for information and has demonstrated its strategic workforce planning system and methodology to several Federal agencies.

### ***Information Technology and Information Management***

An increase of resources in FY 2008 will provide for the Government-wide FY 2008 pay raise and other nondiscretionary compensation and benefits increases, information technology seat management contract escalations, telecommunications equipment replacement, document and records management requirements, enhanced information security to meet new requirements and Government mandates, computer security training. Resources also increase to provide desktop computers and telephone and data communication tools for an increased level of agency FTE staff and to support the information technology needs of the New Reactor sub-program. Resources of $2.1 million in FY 2008 one-time new reactor costs were realigned directly to the New Reactor sub-program before the full-cost allocation. These one-time information technology and information management costs include initial installation of cabling, telephones, high-speed lines and other equipment and software to prepare the new facilities for occupancy. Specifically, the budget includes resources for the following:

- agency desktops and network support, telecommunications services and equipment, data and voice communications services, Internet Service Provider services, audio and video-teleconferencing services, and production operations support.

- applications development, maintenance, and operational support activities for agency information systems, including resources to support the agency Enterprise Architecture (EA) program and compliance with the Federal Information Security Management Act (FISMA).

- implementation of Title 10 Part 95, "Facility Security Clearance and Safeguarding of National Security Information and Restricted Data Implementation," of the *Code of Federal Regulations* (10 CFR Part 95).

- information management activities, including the agency's document management system, public document room, internal and external websites, and Freedom of Information Act and Privacy Act compliance.

*Output Measures*. The requested resources will support agency efforts to achieve the output targets in the following tables. The tables provide historical performance data on the measures from FY 2003 (if available).

| Output Measure: Increase the average security level for all NRC major applications and general support systems in accordance with the Federal IT Security Assessment Framework, as defined by the National Institute of Standards and Technology (NIST) and the CIO Council. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | Achieve an average NIST level of 4.0 with all systems at a minimum level of 3. | Achieve an average NIST level of 4.0 with all systems at a minimum level of 3. | Achieve an average NIST level of 4.0 with all systems at a minimum level of 3. | Achieve an average NIST level of 4.0 with all systems at a minimum level of 3. | Achieve an average NIST level of 4.0 with all systems at a minimum level of 3. | This output measure is deleted in FY 2008 because it is duplicated and covered under the FISMA performance measures. |

## APPENDIX III: EXPLANATION OF THE FULL COST BUDGET ALLOCATION

| Output Measure: Increase the average security level for all NRC major applications and general support systems in accordance with the Federal IT Security Assessment Framework, as defined by the National Institute of Standards and Technology (NIST) and the CIO Council. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Actual: | Target met. | Target met. | Target not met. In response to recent OIG findings in audits and FISMA reviews, system owners are becoming more familiar with security requirements and are self assessing themselves more accurately with an average level of 1.0. | Target not met. In response to recent OIG findings in audits and FISMA reviews, system owners are continuing to becom more familiar with security requirements and are self assessing themselves more accurately with an average level of 1.0. | | |
| This measure supports Management Goal, performance measure number 2. This measure supports Management Goal, performance measure 2.c.1 and 2.c.2. | | | | | | |

## APPENDIX III: EXPLANATION OF THE FULL COST BUDGET ALLOCATION

| Output Measure: All operational NRC major applications and general support systems meet the requirements of Management Directive (MD) 12.5, "NRC Automated Information Systems Program", including system security plans, contingency plans, and certification and accreditation. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | 90% of systems meet MD 12.5 requirements. | 90% of systems meet MD 12.5 requirements. | 95% of systems meet MD 12.5 requirements. | 100% of systems meet MD 12.5 requirements. | 100% of systems meet MD 12.5 requirements. | 90% of systems meet MD 12.5 requirements. |
| Actual: | Met target. The NRC has reviewed all major IT systems to ensure that they are operating within 90% of the targets for cost, scheduling, and reliability. If systems deviate from the 90% target, the NRC will, as required by the Clinger-Cohen Act, identify and implement appropriate corrective actions. | Met target. The NRC has reviewed all major IT systems to ensure that they are operating within 90% of the targets for cost, scheduling, and reliability. If systems deviate from the 90% target, the NRC will, as required by the Clinger-Cohen Act, identify and implement appropriate corrective actions. | Target not met. 54% of systems meet the requirements of Management Directive 12.5. A lack of understanding of current and new IT security requirements has caused NRC to develop a new process to certify and accredit systems. This new process will ensure adequate protection and Management Directive 12.5 compliance, but this will take time. | Target not met. 27% of systems meet the requirements of Management Directive 12.5. A lack of understanding of current and new IT security requirements has caused NRC to develop a new process to certify and accredit systems. This new process will ensure adequate protection and Management Directive 12.5 compliance, but it is estimated to take until the end of FY 2008 to accomplish. | | |
| This measure supports Management Goal, performance measure number 2. This measure supports Management Goal, performance measure 2.c.1 and 2.c.2. | | | | | | |

| Output Measure: Security, availability, and integrity of NRC major applications and general support systems will ensure no interruption to business functions due to IT system security breaches. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | A robust computer security incident response capability is established and maintained to include the regional offices. | A security vulnerability patch testing, dissemination, and tracking capability is maintained for all major applications and general support systems. | All major applications and general support systems have updated security accreditation packages. . | All major applications and general support systems have updated security accreditation packages. | All major applications and general support systems have updated security accreditation packages. | This output measure is deleted in FY 2008 because it is duplicated and covered under the FISMA performance measure. |
| Actual: | Met target. | Met target. | Met target. | Target not met. A lack of understanding of current IT security requirements along with new IT security requirements have caused NRC to develop a new process to certify and accredit systems. This new process will ensure adequate protection and FISMA compliance, but this will take time. | | |
| This measure supports Management Goal, performance measure number 2. | | | | | | |

## APPENDIX III: EXPLANATION OF THE FULL COST BUDGET ALLOCATION

| Output Measure: NRC is addressing all known IT statutory requirements as appropriate. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | For 100% of statutory requirements, the NRC has action plans in place to address requirements. | For 100% of statutory requirements, the NRC has action plans in place to address requirements. | For 100% of statutory requirements, the NRC has action plans in place to address requirements. | For 100% of statutory requirements, the NRC has action plans in place to address requirements. | For 100% of statutory requirements, the NRC has action plans in place to address requirements. | Delete measure in FY 2008. Measure is not meaningful. |
| Actual: | Met target. Actions are underway for all statutory requirements. | Met target. | Met target. | Met target. | | |
| This measure supports Management Goal, performance measure number 2. This measure supports Management Goal, performance measure 2.c.1. | | | | | | |

| Output Measure: Complete at least one key process improvement per year in select program and support areas that increase efficiency, effectiveness, and realism. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | 1 key process completed. | 1 key process completed. | 1 key process completed. | 1 key process completed. | 1 key process completed. | Delete in FY 2008. |
| Actual: | Target not met.<br><br>A contract has been awarded and a list of proposed tasks has been identified by the contractor and is in the process of prioritization by OIS management. The first of a series of process improvement studies will begin during the first quarter of FY 2004. | Met target.<br><br>Contracted a review of the processes and procedures being used to manage the delivery of infrastructure services and received the comprehensive report entitled "Analysis of Operational Procedures" and outlining a high level roadmap to improve in five interrelated areas. The delivery of the report met the measure in FY 2004. | Met target.<br><br>The number of contract vehicles supporting cellular phones and pagers have been reduced from 14 to 9 per recommendation from business process review. | Met target.<br><br>The Decision Lens tool improved the budget prioritization process by reducing time spent by management compared to prior years. | | |
| This measure supports Management Goal, performance measure number 2. | | | | | | |

## APPENDIX III: EXPLANATION OF THE FULL COST BUDGET ALLOCATION

| Output Measure: Network security will respond to any new network security vulnerability upon discovery. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | Respond within 24 hours. | Respond within 24 hours. | Respond within 24 hours. | Respond within 24 hours. | Respond within 24 hours. | Respond within 12 hours. |
| Actual: | Met target (238). Potential network security vulnerabilities responded to within 24 hours of discovery. | Met target (274). Potential network security vulnerabilities responded to within 24 hours of discovery. | Met target (687). Potential network security vulnerabilities responded to within 24 hours of discovery. | Met target (600). Potential network security vulnerabilities responded to within 24 hours of discovery. | | |
| This measure supports Management Goal, performance measure number 2. | | | | | | |

| Output Measure: Ensure that system investments are effective, efficient, and realistic. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | Major systems operate within 90% of cost, schedule, and performance targets as defined by their business case. | Major systems operate within 90% of cost, schedule, and performance targets as defined by their business case. | Major systems operate within 90% of cost, schedule, and performance targets as defined by their business case. | Major systems operate within 90% of cost, schedule, and performance targets as defined by their business case. | Major systems operate within 90% of cost, schedule, and performance targets as defined by their business case. | Major systems operate within 90% of cost, schedule, and performance targets as defined by their business case. |
| Actual: | Met target. The NRC verified that all major IT systems are operating within 90% of their targets. Where systems deviate from the 90% target, NRC will identify and implement the appropriate corrective action. | 13 of 14 major systems operated within 90% of cost, schedule, and performance targets as defined by their business case. One system exceeded its cost baseline by 14% as a result of new requirements identified during its proof of concept and will be re-baselined. | Met target. | Met target. | | |
| This measure supports Management Goal, performance measure number 2. | | | | | | |

## APPENDIX III: EXPLANATION OF THE FULL COST BUDGET ALLOCATION

| Output Measure: Respond to requests and resolve problems through the Infrastructure Services and Support Contract in a timely fashion. Applies to desktops, printers, servers, communications equipment, relocations, additions, modifications and restoration of files. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | 96% of time on average that contracts are meeting their agreed upon service levels. | 96% of time on average that contracts are meeting their agreed upon service levels. | 96% of time on average that contracts are meeting their agreed upon service levels. | 96% of time on average that contracts are meeting their agreed upon service levels. | N/A: This measure will no longer be reported externally. | N/A: This measure will no longer be reported externally. |
| Actual: | 96.4% | 90.0%* | 97% | 99.7% | | |
| *The 96% goal was not achieved because in several instances the Service Level Requirements for e-mail availability/restoration and hardware/software installs were not met. A proposed amendment to the contract to increase reliability is currently under management review.<br>This target may also be modified in the future to reflect agency experience. This measure supports Management Goal, performance measure number 2. | | | | | | |

| Output Measure: Conduct a user satisfaction survey for ADAMS. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | New target in FY 2006. | | | Score at least a 3 on a scale of 1-4. | N/A. Survey conducted every 2 years. | Score at least a 3 on a scale of 1-4. |
| Actual: | | | | Deployment of the survey has been postponed until quarter 1 of FY 2007. Results of the survey will be reported in FY 2007. Will support new goals in FY 2009 IT/IM Strategic Plan. | | |
| This measure supports Management Goal, performance measure number 2. | | | | | | |

| Output Measure: Percent of agency enterprise architecture (EA) data aligned with OMB guidance. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | New measure in FY 2004. | 80% of agency EA data aligned. | 80% of agency EA data aligned. | 80% of agency EA data aligned. | 80% of agency EA data aligned. | 90% of agency EA data aligned. |
| Actual: | N/A | N/A | 80% | 80% | | |
| This measure supports Management Goal, performance measure number 2. | | | | | | |

## APPENDIX III: EXPLANATION OF THE FULL COST BUDGET ALLOCATION

### *FY 2006 Significant Accomplishments*

Information Technology/Information Management (IT/IM) Strategic Plan: During FY 2006, with the participation of all major agency program and support organizations, the NRC developed a new IT/IM Strategic Plan responsive to Federal requirements in the Paperwork Reduction Act and Clinger-Cohen Acts. The goals, strategies, and measures in this plan provide the foundation for directing and assessing the performance of the NRC's IT/IM program over the next 5 years. Its scope covers all of the NRC's IT/IM resources agencywide, including local and wide area networks, computers, and telecommunication devices; information and records management functions; and all applications including mission- critical systems as such payroll, personnel and accounting. The NRC will adjust the IT/IM Strategic Plan as necessary to reflect the next revision of the NRC Strategic Plan (FY 2007-FY2012), scheduled to be completed by the end of FY 2007.

Automated Comment Capture System: This system was designed to receive and distribute public comments on the environmental impact statement for the North Anna early site permit. Incoming comments are automatically tagged, added to the official agency records system, and immediately forwarded to NRC technical experts for review and response. This information technology system removes multiple manual steps and frees two organizations from administrative tasks required under the old process. During the initial round of comments on this document, comments overwhelmed the agency's manual process for managing them, resulting in a significant delay and increased Congressional scrutiny. This information technology system successfully met an aggressive implementation time line of approximately 4 months and can now handle public comment processing for other matters such as New Reactor Licensing.

### Financial Management

An increase of resources in FY 2008 will provide for payment and payroll services to support an increasing agency workload and modernization of three financial systems. Modernization of the core accounting, license fee billing, and time and labor systems is necessary because of the lack of continued vendor support for the existing software. Furthermore, the resource increase will provide for the Government-wide FY 2008 pay raise and other nondiscretionary compensation and benefits increases. Specifically, the budget provides resources for the following:

- agency planning, budgeting, accounting and financial systems and activities.

- ensuring agency compliance with the Government Performance and Results Act, including updating the agency's strategic plan and developing its annual performance plan and annual performance report; resources also support independent evaluations for the OMB Program Assessment Rating Tool (PART) reviews.

- will begin implementation of E-travel in FY 2008, which will provide an integrated travel system that is expected to reduce the need for repetitive data input and more efficiently meet the needs of travelers.

*Output Measures*. The requested resources will support agency efforts to achieve the output targets established in the following tables. The tables provide historical performance data on the measures from FY 2003 (if available).

| Output Measure: Complete PART evaluations in accordance with agency-approved schedule. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | Complete PART evaluations by September 2003. | Complete PART evaluations by June 2004 for Nuclear Materials Users Licensing and Inspection Subprogram. | Complete PART evaluations by June 2005 for Spent Fuel Storage and Transportation Licensing Inspection subprogram and for Reactor Licensing Inspection subprogram. | Complete PART evaluations by June 2006 for Decommission-ing and Low-Level Waste subprogram. | Complete PART evaluations by April 2007 for High-Level Waste Repository subprogram and Decommissioning and Low-level Waste Subprogram. | Reactor Inspection and New Reactor Licensing (proposed). |
| Actual: | Target met. | Target met. | Target met. | N/A postponed by OMB to FY 2007. | | |
| This measure supports Management Goal, performance measure number 2. | | | | | | |

| Output Measure: Submit and publish the triennial Strategic Plan to Congress and OMB on time. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | Submit and publish FY 2003 - FY 2008 Strategic Plan September 29, 2003.* | Publish FY 2004 - FY 2009 Strategic Plan on August 12, 2004. | Not required until FY 2007. | Not required until FY 2007. | Submit and publish FY 2007- FY 2012 Strategic Plan August 11, 2007. | Not required until FY 2010. |
| Actual: | Target not met.* | Target met. | N/A | N/A | | |
| *Date extended until August 12, 2004, because of extensive agency rewrite and review.<br>This measure supports Management Goal, performance measure number 2. | | | | | | |

## APPENDIX III: EXPLANATION OF THE FULL COST BUDGET ALLOCATION

| Output Measure: Meet statutory fee collection requirement. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | Achieve approximately 100% actual collections when compared with projected collections. Maintain past due accounts receivable at 1% or less of annual billings for the fiscal year. | Achieve approximately 100% actual collections when compared with projected collections. Maintain past due accounts receivable at 1% or less of annual billings for the fiscal year. | Achieve approximately 100% actual collections when compared with projected collections. Maintain past due accounts receivable at 1% or less of annual billings for the fiscal year. | Achieve approximately 100% actual collections when compared with projected collections. Maintain past due accounts receivable at 1% or less of annual billings for the fiscal year. | Achieve approximately 100% actual collections when compared with projected collections. Maintain past due accounts receivable at 1% or less of annual billings for the fiscal year. | Achieve approximately 100% actual collections when compared with projected collections. Maintain past due accounts receivable at 1% or less of annual billings for the fiscal year. |
| Actual: | Target met. | Target met. | 98.9% collected. Maintained past due accounts receivable at less than 0.08% of annual billings. | Target met. | | |
| This measure supports Management Goal, performance measure number 2. | | | | | | |

| Output Measure: Publish proposed and final fee rules. | | | | | | |
|---|---|---|---|---|---|---|
| | **FY 2003** | **FY 2004** | **FY 2005** | **FY 2006** | **FY 2007** | **FY 2008** |
| Target: | Proposed rule mid-March, final rule mid-June. | Proposed rule mid-March, final rule mid-June. | Proposed rule mid-March, final rule mid-June. | Proposed rule mid-March, final rule mid-June. | Proposed rule mid-March, final rule mid-June. | Proposed rule mid-March, final rule mid-June. |
| Actual: | Target met. | Target met. | Target met. | Target met. | | |
| This measure supports Management Goal, performance measure number 2. | | | | | | |

### Policy Support

An increase of resources in FY 2008 will provide for additional policy and adjudicatory support to the Commission, as well as for program oversight related to new reactor activities. The increase also provides for the Government-wide FY 2008 pay raise and other nondiscretionary compensation and benefits increases. Specifically, the budget provides resources for the following:

- agency policy formulation, advice and assistance to the Commission on Congressional issues, adjudicatory review, legal advice, management and oversight of agency programs, and public affairs activities leading to openness and increased public confidence.

## APPENDIX III: EXPLANATION OF THE FULL COST BUDGET ALLOCATION

### Permanent Change of Station

An increase of resources in FY 2008 will provide for permanent-change-of-station costs based on projected FTE increases. Specifically, the budget provides resources for the following:

- Employee relocations, including resident inspector moves and agency new hires, and the average cost per move drive permanent-change-of-station costs. Agency FTE growth and mandatory transfers of resident inspectors, in addition to inflation, result in increased costs.

## APPENDIX III: EXPLANATION OF THE FULL COST BUDGET ALLOCATION

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## NRC DATA COLLECTION PROCEDURES

Most of the data used to measure the NRC's performance against its strategic goals related to safety are obtained or derived from the NRC's abnormal occurrence (AO) data and reports submitted by licensees. The AO criteria have been amended to ensure that they are consistent with the NRC's Strategic Plan for Fiscal Year (FY) 2004–2009 and with the NRC rulemaking on Title 10, Part 35, "Medical Use of Byproduct Material," of the *Code of Federal Regulations* (10 CFR Part 35).

The NRC developed its AO criteria to comply with the legislative intent of section 208 of the Energy Reorganization Act of 1974, as amended. This act requires the NRC to inform the Congress of unscheduled incidents or events that the Commission determines to be significant from the standpoint of public health and safety. The agency includes events that meet the AO criteria in its annual "Report to Congress on Abnormal Occurrences" (NUREG-0090). In addition, in 1997, the Commission determined that events occurring at Agreement State-licensed facilities that meet the AO criteria should be reported in the annual AO report to Congress. Therefore, the AO criteria developed by the NRC are uniformly applied to events that occur at facilities, licensed or otherwise, that are regulated by the NRC and the Agreement States.

Data for AOs originate from external sources, such as Agreement States and NRC licensees. The NRC believes that these data are credible because (1) NRC regulations require the reporting of the information needed from external sources; (2) the NRC maintains an aggressive inspection program that, among other activities, audits licensees and evaluates Agreement State programs to determine whether information is being reported as required by the regulations; and (3) agency procedures address reviewing and evaluating licensees. The NRC database systems that support this process include the Licensee Event Report Search (LERSearch) system, the Accident Sequence Precursor (ASP) database, the Nuclear Materials Events Database (NMED), and the Radiation Exposure Information Report system.

The NRC has established procedures for the systematic review and evaluation of events reported by NRC licensees and Agreement State licensees. The objective of the review is to identify events that are significant from the standpoint of public health and safety based on criteria that include specific thresholds. The NRC uses a number of sources to determine the reliability and technical accuracy of event information reported to the agency. Such sources include (1) the NRC licensee reports, which are carefully analyzed, (2) NRC inspection reports, (3) Agreement State reports, (4) periodic reviews of Agreement State regulatory programs, (5) NRC consultant/contractor reports, and (6) U.S. Department of Energy operating experience weekly summaries. In addition, daily interactions and exchanges of event information occur between headquarters and the regional offices, and staff participate in periodic conference calls among headquarters, the regions, and Agreement States to discuss event information. All applicable NRC Headquarters program offices, regional offices, and agency management personnel validate and verify identified events that meet the AO criteria before their submission to Congress.

The Agency Action Review meeting provides another opportunity for NRC's senior management to discuss significant events, licensee performance issues, trends, and actions that the NRC needs to take to mitigate recurrences.

The agency's computer security program maintains data protection and provides administrative, technical, and physical security measures to guard the agency's information, automated information systems, and information technology infrastructure. These measures include special safeguards to protect classified information, unclassified safeguards information, and sensitive unclassified information that are processed, stored, or produced on designated automated information systems.

## Goal 1—Safety: Ensure protection of public health and safety and the environment

## Nuclear Reactor Safety

***Strategic Outcomes***

- ***No nuclear reactor accidents***
- ***No inadvertent criticality events***
- ***No acute radiation exposures resulting in fatalities***
- ***No releases of radioactive materials that result in significant radiation exposures***
- ***No releases of radioactive materials that cause significant adverse environmental impacts***

***Verification:*** Licensees report any nuclear reactor events at their facilities in licensee event reports (LERs). The NRC reviews the LER data, and the agency's AO coordinators then discuss each potential AO during their periodic meetings at headquarters and the regional offices to determine whether it meets the AO reporting criteria. The staff use the LERs to identify any nuclear reactor accidents, deaths from acute radiation exposures, events that result in significant radiation exposure, or releases of radioactive materials that cause significant adverse environmental impacts that meet the criterion for an AO. In addition, NRC specialists periodically conduct inspections to assess licensee compliance with reporting criteria as well as radiological and environmental release criteria. If a licensee reports an event involving core damage, NRC inspectors carefully investigate the event to ensure the validity of the information in the licensee's report. In addition, a resident inspector on duty at each reactor monitors the facility in real time. The resident inspector verifies the safe operation of the facility and would be aware of any instances in which core damage has occurred or radiation was released from the reactor in excess of reporting limits.

## APPENDIX IV: VERIFICATION AND VALIDATION OF NRC MEASURES AND METRICS

The NRC staff prepares AO writeups and evaluates events, using specific criteria to select those events that the staff recommends to the Commission to be considered as AOs. The NRC's Office of Nuclear Regulatory Research makes the final determination about which events to recommend for consideration as potential AOs. NRC Management Directive 8.1, "Abnormal Occurrence Reporting Procedure," provides thorough documentation of the AO reporting process.

***Validation:*** Validation addresses the issues below.

No nuclear reactor accidents. The NRC Severe Accident Policy Statement defines nuclear reactor accidents as those events that result in substantial damage to the reactor fuel, regardless of whether offsite consequences occur.

No inadvertent criticality events. Events collected under this performance measure are actual occurrences of accidental criticality. Such events could compromise public health and safety, the environment, and the common defense and security. Events of this magnitude are not expected and would be rare. If such an event occurs, it would result in a prompt and thorough investigation, including consequences, root causes, and necessary actions by the licensee and the NRC to mitigate the consequences and prevent recurrence.

No acute radiation exposures resulting in fatalities. Determining whether any deaths result from acute radiation exposure is fundamentally essential to protecting public health and safety. Events of this magnitude are rare. If such an unlikely event occurs, it would result in a prompt and thorough investigation of the event, its consequences, its root causes, and necessary actions by the licensee and/or the NRC to mitigate the consequences and prevent recurrence. This strategic outcome measure is a direct measurement of the occurrence of radiation-related deaths at nuclear reactors.

No releases of radioactive materials that result in significant radiation exposures. Nuclear power generation produces radiation, which can be harmful if not properly controlled. Measuring the number of events resulting in significant radiation exposures, as well as any deaths from radiation exposure, indicates whether radiation-related deaths and illness are being prevented. 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 AO Criterion 1.A.3.

No releases of radioactive materials that cause significant adverse environmental impacts. The radiation produced in the process of generating power from nuclear materials can also potentially harm the environment if it is not properly controlled. Releases that have the potential to adversely impact the environment are currently undefined. As a surrogate for this performance measure, the NRC collects data on the frequency of radiation releases into the environment that exceed specified limits. Criterion 1.B.1 in Appendix A to NUREG-0090 defines such releases as those involving "the release of radioactive material to an unrestricted area in concentrations which, if averaged over a period of 24 hours, exceed 5,000 times the values specified in Table 2 of Appendix B to 10 CFR Part

20, unless the licensee has demonstrated compliance with 20.1301 using 20.1302(b)(1) or 20.1302 (b)(2)(ii)." The essence of the criterion is that events that result in unintended permanent functional damage to an organ or a physiological system as determined by a physician are used as the measure for events that result in releases of radioactive material causing an adverse impact on the environment. Such events are reported in LERs, which are sent to the NRC as documentation of reportable occurrences. This strategic outcome measure is a direct measurement of instances in which harmful impacts on the environment occur because of nuclear reactors.

***Performance Measures***

- ***Number of significant safety events and conditions per year at reactor facilities***

- ***Number of new conditions evaluated as red by the NRC's Reactor Oversight Process, with a reactor safety target of less than or equal to 3***

***Verification:*** The data for this performance measure are collected in two ways as part of the NRC's Reactor Oversight Process (ROP). NRC inspectors collect inspection findings at least quarterly. Inspectors use formal detailed inspection procedures to review plant operations and maintenance. NRC managers review inspection findings to assess their significance as part of the ROP significance determination process. Licensees collect the data for performance indicators and submit them to the NRC at least quarterly. The thresholds for each indicator determine the significance of the data. The NRC conducts inspections of licensee processes for collecting and submitting the data to ensure completeness, accuracy, consistency, timeliness, and validity.

The NRC enhances the quality of its inspections through inspector feedback and periodic reviews of results, and inspectors are trained through a rigorous qualification program. The quality of performance indicators is improved through continuous feedback from licensees and inspectors that is incorporated into guidance documents. The NRC publishes the inspection findings and performance indicators on the agency's Web site and incorporates feedback received from all stakeholders as appropriate.

***Validation:*** The inspection findings and performance indicators used by the ROP cover a broad range of plant operations and maintenance. NRC managers review significant issues that are identified, and inspectors conduct supplemental inspections of selected aspects of plant operations as appropriate. Senior agency managers annually review plants that are identified as having performance issues, as well as a self-assessment of the ROP, and then report the results to the Commission.

This measure indicates the number of new red inspection findings during the fiscal year plus the number of new red performance indicators during the fiscal year. Programmatic issues at multiunit sites that result in red findings for each individual unit are considered as separate conditions for purposes of reporting for this measure. A red performance indicator and a red inspection finding

that are attributable to an issue with the same underlying causes are also considered as separate conditions for purposes of reporting for this measure. Red inspection findings are included in the fiscal year in which the final significance determination was made. Red performance indicators are included in the fiscal year in which the ROP external Web page was updated to show the red indicator.

- ***Number of significant safety events and conditions per year at reactor facilities***

- ***Number of significant ASPs of a nuclear accident, with a reactor safety target of 0***

***Verification:*** The Commission has an ASP program to systematically evaluate U.S. nuclear power plant operating experience to identify, document, and rank those operating events that were most significant in terms of the potential for inadequate core cooling and core damage (i.e., precursors). The ASP program evaluation process has five steps. First, the NRC screens operating experience data to identify events and/or conditions that may be potential precursors to a nuclear accident. The data that are evaluated include LERs from the LERSearch database, incident investigation team or augmented inspection team reviews, the NRC's daily screening of operational events, and other events identified by NRC staff as candidates. Second, the staff conducts an engineering review of these screened events using specific criteria to identify those events requiring detailed analyses as candidate precursors. Third, the NRC staff calculates a conditional core damage probability by mapping failures observed during the event to accident sequences in risk models. Fourth, the preliminary potential precursor analyses are provided to the NRC staff and the licensee for independent peer review. However, for ASP analyses of noncontroversial, low-risk precursors for which the ASP results reasonably agree with the significance determination process results, licensees may not perform formal peer reviews. The NRC staff will continue to perform an in-house review process for all analyses. Fifth, the NRC provides findings from the analyses to the licensee and the public.

It must also be noted that a time lag exists in obtaining ASP analysis results because they are often based on LERs (submitted up to 60 days after an event), and most analyses take approximately 6 months to finalize. The agency will report final data in the year in which the event occurred.

***Validation:*** The ASP program identifies significant precursors as those events that have a 1/1000 ($10^{-3}$) or greater probability of leading to a nuclear reactor accident. Significant ASP events have a conditional core damage probability or $\Delta$CDP of greater than or equal to $1x10^{-3}$.

- ***Number of operating reactors whose integrated performance entered the Inspection Manual Chapter 0350 process, the multiple/repetitive degraded cornerstone column, or the unacceptable performance column of the ROP Action Matrix, with a reactor safety target of less than or equal to 4***

***Verification:*** The NRC's ROP collects data for this performance measure continuously, and the agency publishes the information at least quarterly. NRC inspectors use detailed formal procedures to inspect licensee performance, and NRC managers review the results to ensure the completeness, accuracy, consistency, timeliness, and validity of the data.

The NRC enhances the quality of its inspections through inspector feedback and periodic reviews of results, and inspectors are trained through a rigorous qualification program. The quality is also improved through continuous feedback from licensees and inspectors that is incorporated into guidance documents. The NRC publishes the data on the agency's Web site and incorporates feedback received from all stakeholders as appropriate.

***Validation:*** The information collected by the ROP covers a broad range of plant operations and maintenance. NRC managers review significant issues that are identified, and inspectors conduct supplemental inspections of selected aspects of plant operations as appropriate. Senior managers annually review plants that are identified as having performance issues, as well as the agency's self-assessment of the ROP, and then report the results to the Commission.

This measure is the number of plants that have entered the Inspection Manual Chapter 0350 process, the multiple/repetitive degraded cornerstone column, or the unacceptable performance column during the fiscal year (i.e., were not in these columns or process the previous fiscal year). Data for this measure are obtained from the NRC external Web Action Matrix summary page, which provides a matrix of the five columns with the plants listed within their applicable columns and notes the plants in the Inspection Manual Chapter 0350 process. For reporting purposes, plants that are the subject of an approved deviation from the Action Matrix are included in the column or process in which they appear on the Web page.

- ***Number of significant adverse trends in industry safety performance, with a reactor safety target of less than or equal to 1***

***Verification:*** The data for this performance measure are derived from data supplied by all power plant licensees in LERs, data from monthly operating reports, and performance indicator data submitted for the ROP. These data are (1) required by 10 CFR 50.73, "License Event Report System," and/or plant-specific technical specifications or (2) submitted by all plants as part of the ROP. Detailed NRC guidelines and procedures are in place to control each of these reporting processes. The NRC reviews these procedures for appropriateness both periodically and in response to licensee feedback. The NRC also conducts periodic inspections of licensee processes for collecting and submitting the data to ensure completeness, accuracy, consistency, timeliness, and validity.

All licensees report the data at least quarterly. The NRC staff reviews all of the data and conducts inspections to verify safety-significant information. The NRC also employs a contractor to review the data submitted by licensees, enter the data in a database, and compile the data into various

indicators. Quality assurance processes for this work have been established and included in the statement of work for the contract. Administration of the contract controls the experience and training of key personnel. The contractor identifies discrepancies and submits them to both licensees and the NRC for resolution. The NRC reviews the indicators and publishes them on the agency's Web site quarterly. The agency also incorporates feedback from licensees and the public as appropriate.

The target value is based on the expected addition of several indicators and a change in the long-term trending methodology (which will no longer be influenced by the earlier data and will be more sensitive to changes in current performance).

***Validation:*** The data and indicators that support reporting against this performance measure provide a broad range of information on nuclear power plant performance. The NRC staff tracks indicators and applies statistical techniques to obtain an indication of whether industry performance is improving, steady, or degrading over time. If the staff identifies any adverse trends, the NRC addresses the problem through its processes for handling generic safety issues and issuing generic communications to licensees. The NRC is developing additional risk-informed indicators to enhance the current set of indicators. In doing so, the staff considers the costs and benefits of collecting the data through ongoing, extensive interactions with industry regarding the indicators. Senior managers annually review the Industry Trends program and report the results to the Commission.

- ***Number of events with radiation exposures to the public and occupational workers from nuclear reactors that exceed AO Criterion I.A with a reactor safety target of 0***

***Verification:*** Licensees report overexposures through the Sequence Coding and Search System (SCSS) LER database, maintained at the Oak Ridge National Laboratory, which receives all LERs and codes them into a searchable database. The SCSS database is used to identify those LERs that report overexposures. NRC resident inspectors stationed at each nuclear power plant provide a high degree of assurance that all events meeting reporting criteria are reported to the NRC. In addition, the NRC conducts inspections if there is any indication that an exposure exceeded or could have exceeded a regulatory limit. Moreover, areas of the facility that may be subject to radiation contamination have monitors that record radiation levels. These monitors would immediately reveal any instances in which high levels of radiation exposure occurred.

***Validation:*** Given the nature of the process of using radioactive materials to generate power, overexposure to radiation is a potential danger from the operation of nuclear power plants. Such exposure to radiation that exceeds the applicable regulatory limits may potentially occur through either a nuclear accident or other malfunctions at the plant. Consequently, tracking the number of overexposures that occur at nuclear reactors is an important indicator of the degree to which safety is being maintained.

- ***Number of radiological releases to the environment from nuclear reactors that exceed applicable regulatory limits, with a reactor safety target of less than or equal to 2***

***Verification:*** As with worker overexposures, licensees report environmental releases of radioactive materials that exceed regulations or license conditions through the SCSS LER database maintained at the Oak Ridge National Laboratory. The SCSS database will be used to identify those LERs reporting releases, and the number of reported releases is then applied to this measure. The NRC also conducts periodic inspections of licensees to ensure that they properly monitor and control releases to the environment through effluent pathways. In addition, onsite monitors would record any instances in which the plant releases radiation into the environment. If the inspections or the monitors reveal any indication that an accident or inadvertent release has occurred, the NRC conducts followup inspections.

***Validation:*** The generation of nuclear power creates radioactive materials that are released into the environment in a controlled manner. These radioactive discharges are subject to regulatory controls that limit the quantity discharged and the resultant dose to members of the public. Consequently, the NRC tracks all releases of radioactive materials in excess of regulatory limits as a performance measure because large releases that exceed regulatory limits have the potential to endanger public safety or harm the environment. The NRC inspects every nuclear power plant for compliance with regulatory requirements and specific license conditions related to radiological effluent releases. The inspection program includes enforcement actions to be taken for violations of the regulations or license conditions, based on the severity of the event.

This performance measure includes dose values that are classified as being as low as reasonably achievable (ALARA), as defined in Appendix I, "Numerical Guides for Design Objectives and Limiting Conditions for Operation to Meet the Criterion 'As Low As Is Reasonably Achievable' For Radioactive Material in Light-Water-Cooled Nuclear Power Reactor Effluents," to 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," as well as the public dose limits in 10 CFR Part 20, "Standards for Protection Against Radiation." Because the performance measure includes ALARA values, which are not safety limits, and because Appendix I to 10 CFR Part 50 allows licensees to temporarily exceed, for good reason, the ALARA dose values, the performance measure is 2.

# Goal 1—Safety: Ensure protection of public health and safety and the environment

## Nuclear Material and Waste Safety

***Strategic Outcomes***

- ***No inadvertent criticality events***
- ***No acute radiation exposures resulting in fatalities***
- ***No releases of radioactive materials that result in significant radiation exposures***
- ***No releases of radioactive materials that cause significant adverse environmental impacts***

***Verification:*** Verification addresses the issues discussed below.

No inadvertent criticality events. Inadvertent criticality events must be reported, regardless of whether they result in exposures or injuries to workers or the public and regardless of whether they result in adverse impacts to the environment. Licensees immediately report criticality events to the NRC Headquarters Operations Center by telephone through the cognizant licensee safety officer. Followup written reports must be submitted to the NRC within 30 days of the initial report. Such reports must contain specific information concerning the event, as specified by 10 CFR 70.50(c)(2) and 10 CFR 76.120(d)(2). The NRC then dispatches an inspection team to confirm the reliability of the data. The event is also tracked through NMED. The NRC would immediately investigate and follow up on an event of this nature.

If an event meeting this threshold occurs, it would be reported to the NRC through a number of sources, but primarily through required licensee notifications. Event notifications and preliminary notifications, which are used to widely disseminate the information to internal and external stakeholders, summarize these events. For activities of the Office of Nuclear Material Safety and Safeguards (NMSS) and the Office of Federal and State Materials and Environmental Management Programs (FSME), NMED is an essential system used to collect information on such events.

The fuel cycle, materials, high-level waste repository, and spent fuel storage and transportation inspection programs are key elements in verifying the completeness and accuracy of licensee reports. The Integrated Materials Performance Evaluation Program (IMPEP) also provides a mechanism to verify that NRC regions are consistently and properly collecting and reporting such events as received from the licensees and entering them in NMED.

The NRC has taken a number of steps to improve the timeliness and completeness of materials event data. These steps include assessment of NMED data during monthly staff reviews; emphasis and

analysis during the IMPEP reviews; NMED training in headquarters, the regions, and Agreement States; and discussions at all Agreement State and Conference of Radiation Control Program Directors (CRCPD) meetings.

***Validation:*** Events collected under this strategic outcome are actual occurrences of accidental criticality. Such events could compromise public health and safety, the environment, and the common defense and security. Events of this magnitude are not expected and would be rare. If such an event occurs, it would result in a prompt and thorough investigation of its consequences, its root causes, and the necessary actions by the licensee and the NRC to mitigate the situation and prevent recurrence. Therefore, the strategic outcome of no inadvertent criticalities represents a valid measure of ensuring adequate protection of public health and safety.

In assessing the validity of the data collected as appropriate for the strategic outcome, the staff has determined that a logical relationship exists between the data collected and the strategic outcome. Given the magnitude and rarity of a criticality event, the NRC believes that the probability of being unaware of an inadvertent criticality is very small.

***Verification:*** Verification addresses the issues discussed below.

No acute radiation exposures resulting in fatalities. Determining whether a death resulted from acute radiation exposure is fundamentally essential to ensure the protection of public health and safety.

If an event meeting this threshold occurs, it would be reported to the NRC and/or Agreement States through a number of sources, but primarily through required licensee notifications. Event notifications and preliminary notifications, which are used to widely disseminate the information to internal and external stakeholders, summarize these events. For activities of NMSS and FSME, NMED is an essential system used to collect information on such events.

The fuel cycle, materials, high-level waste repository, decommissioning, and spent fuel storage and transportation inspection programs are key elements in verifying the completeness and accuracy of licensee reports. The IMPEP also provides a mechanism to verify that Agreement States and NRC regions are consistently collecting and reporting such events as received from the licensees and entering them in NMED.

The NRC has taken a number of steps to improve the timeliness and completeness of materials event data. These steps include assessment of NMED data during monthly staff reviews; emphasis and analysis during the IMPEP reviews; NMED training in headquarters, the regions, and Agreement States; and discussions at all Agreement State and CRCPD meetings.

***Validation:*** There is a logical basis for using no acute radiation exposures resulting in fatalities as a strategic outcome for ensuring the protection of public health and safety. The NRC's regulatory

process—including licensing, inspection, guidance, regulations, and enforcement activities—is sufficient to ensure that no fatalities are attributable to acute radiation exposure.

Events of this magnitude are not expected and would be rare. In the unlikely event that a death occurs, the NRC or Agreement State technical specialists, with input from expert consultants as necessary, decide whether to ascribe the cause of a death to (1) conditions related to acute radiation exposures or (2) exposure to other radioactive hazardous materials (for fuel cycle activities, this extends to other hazardous materials used with, or produced from, licensed material consistent with 10 CFR Part 70, "Domestic Licensing of Special Nuclear Material").

The NRC believes that the data collected to meet this strategic outcome are free from bias. NMSS and FSME do not use statistical sampling of data to determine results. Rather, they review all events data to determine whether the strategic outcome has been met.

Two important data limitations in determining this strategic outcome are the delay time for receiving information and/or the failure of the NRC to become aware of an event that results in a fatality. Although NMSS and FSME procedures and NRC regulations associated with event reporting include specific requirements for timely notifications, a lag time separates the occurrence of an event and the known consequences of that event.

The NRC believes that the probability of being unaware of a fatality attributable to acute radiation exposure is very small. Periodic licensee inspections and regulatory reporting requirements are sufficient to ensure that an event of this magnitude would become known.

If such an event occurs, it would result in a prompt and thorough investigation of the event, its consequences, its root causes, and the necessary actions by the licensee and the NRC to mitigate the situation and prevent recurrence. In addition to these immediate actions, the NRC holds periodic meetings where staff and management review events that appear to meet this strategic outcome.

***Verification:*** Verification addresses the issues discussed below.

No releases of radioactive materials that result in significant radiation exposures. NMSS and FSME define this strategic outcome as any discharge or dispersal of radioactive materials from the intended place of confinement—or discharge or dispersal of radioactive wastes during storage, transport, or disposal—that causes significant radiation exposures to a member of the public or occupational worker that directly result in unintended permanent functional damage to an organ or physiological system, as determined by a physician in accordance with AO Criterion I.A.3. (This metric does not include exposures from sealed sources. Exposure from sealed sources would fall under the performance measure for number of events with radiation exposures to the public and occupational workers from radioactive material that exceed AO Criterion I.A.)

If an event meeting this threshold occurs, it would be reported to the NRC and/or Agreement States through a number of sources, but primarily through required licensee notifications. Event notifications and preliminary notifications, which are used to widely disseminate the information to internal and external stakeholders, summarize these events. For activities of NMSS and FSME, NMED is an essential system used to collect information on such events.

The fuel cycle, materials, high-level waste repository, decommissioning, and spent fuel storage and transportation inspection programs are key elements in verifying the completeness and accuracy of licensee reports. The IMPEP also provides a mechanism to verify that Agreement States and NRC regions are consistently collecting and reporting such events as received from the licensees and entering them in NMED.

The NRC has taken a number of steps to improve the timeliness and completeness of materials event data. These steps include assessment of NMED data during monthly staff reviews; emphasis and analysis during the IMPEP reviews; NMED training in headquarters, the regions, and Agreement States; and discussions at all Agreement State and CRCPD meetings.

***Validation:*** There is a logical basis for using a threshold of no releases of radioactive materials that result in significant radiation exposures as a strategic outcome for ensuring the protection of public health and safety. 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 AO Criterion I.A.3. The NRC's regulatory process—including licensing, inspection, guidance, regulations, and enforcement activities—is sufficient to ensure that there are no releases of radioactive materials that result in significant radiation exposures.

Events of this magnitude are not expected and would be rare. In the unlikely event that a significant exposure occurs, NRC or Agreement State technical specialists, with input from expert consultants as necessary, decide whether to ascribe the permanent functional damage to (1) conditions related to acute radiation exposures or (2) exposure to other radioactive hazardous materials (for fuel cycle activities, this extends to other hazardous materials used with, or produced from, licensed material consistent with 10 CFR Part 70).

The NRC believes that the data collected to meet this strategic outcome are free from bias. NMSS and FSME do not use statistical sampling of data to determine results. Rather, they review all event data to determine whether the strategic outcome has been met.

Two important data limitations in determining this strategic outcome are the delay time for receiving information and/or the failure of the NRC to become aware of an event that results in significant radiation exposures. Although NMSS and FSME procedures and NRC regulations associated with event reporting include specific requirements for timely notifications, a lag time separates the occurrence of an event and the known consequences of that event.

The NRC believes that the probability of being unaware of an event that results in significant radiation exposures is very small. Periodic licensee inspections and regulatory reporting requirements are sufficient to ensure that an event of this magnitude would become known.

If such an event occurs, it would result in a prompt and thorough investigation of the event, its consequences, its root causes, and the necessary actions by the licensee and the NRC to mitigate the situation and prevent recurrence. In addition to these immediate actions, the NRC holds periodic meetings where staff and management review events that appear to meet this strategic outcome.

***Verification:*** Verification addresses the issues discussed below.

No releases of radioactive materials that cause significant adverse environmental impacts. Releases that have the potential to cause adverse environmental impacts are currently undefined. The NRC will use as a surrogate any discharge or dispersal of radioactive materials from the intended place of confinement—or discharge or dispersal of radioactive wastes during storage, transport, or disposal—that exceeds the limits for reporting AOs in AO Criterion 1.B.

If an event meeting this threshold occurs, it would be reported to the NRC and/or Agreement States through a number of sources, but primarily through required licensee notifications. Event notifications and preliminary notifications, which are used to widely disseminate the information to internal and external stakeholders, summarize these events. For NMSS activities, NMED is an essential system used to collect information on such events.

The fuel cycle, materials, high-level waste repository, decommissioning, and spent fuel storage and transportation inspection programs are key elements in verifying the completeness and accuracy of licensee reports. The IMPEP also provides a mechanism to verify that Agreement States and NRC regions are consistently collecting and reporting such events as received from the licensees and entering them in NMED.

The NRC has taken a number of steps to improve the timeliness and completeness of materials event data. These steps include assessment of NMED data during monthly staff reviews; emphasis and analysis during the IMPEP reviews; NMED training in headquarters, the regions, and Agreement States; and discussions at all Agreement State and CRCPD meetings.

***Validation:*** There is a logical basis for using releases of radioactive materials that cause significant adverse environmental impacts as a strategic outcome for ensuring the protection of the environment. Releases that have the potential to cause adverse environmental impacts are those that exceed the limits for reporting AOs in AO Criterion 1.B.1. The NRC's regulatory process—including licensing, inspection, guidance, regulations, and enforcement activities—is sufficient to ensure that there are no releases of radioactive materials that cause significant adverse environmental impacts.

Events of this magnitude are not expected and would be rare. In the unlikely event of a release of radioactive materials (for fuel cycle activities, this extends to other hazardous materials used with, or produced from, licensed material consistent with 10 CFR Part 70), NRC or Agreement State technical specialists, with input from expert consultants as necessary, decide whether the release caused a significant adverse environmental impact.

The NRC believes that the data collected to meet this strategic outcome are free from bias. NMSS and FSME do not look at statistical sampling of data to determine results. Rather, they review all event data to determine whether the strategic outcome has been met.

Two important data limitations in determining this strategic outcome are the delay time for receiving information and/or the failure of the NRC to become aware of an event that causes significant adverse environmental impacts. Although NMSS and FSME procedures and NRC regulations associated with event reporting include specific requirements for timely notifications, a lag time separates the occurrence of an event and the known consequences of that event.

The NRC believes that the probability of being unaware of an event that causes significant adverse environmental impacts is very small. Periodic licensee inspections and regulatory reporting requirements are sufficient to ensure that an event of this magnitude would become known.

If such an event occurs, it would result in a prompt and thorough investigation of the event, its consequences, its root causes, and the necessary actions by the licensee and the NRC to mitigate the situation and prevent recurrence. In addition to these immediate actions, the NRC holds periodic meetings where staff and management review events that appear to meet this strategic outcome.

***Performance Measures***

- ***Number of events with radiation exposures to the public and occupational workers from radioactive material that exceed AO Criteria I.A, with a materials safety target of less than or equal to 6 and a waste safety target of 0***

***Verification:*** This performance measure includes any event involving licensed radioactive materials that results in significant radiation exposures to members of the public and/or occupational workers that exceed the dose limits in the AO reporting criteria. Because of the extremely high doses employed during medical applications of radioactive materials, it is also appropriate to use a radiation exposure that results in unintended permanent functional damage to an organ or a physiological system (as determined by a physician) as a criterion for this measure. AO Criterion 1.A is the basis for this measure.

If an event meeting this threshold occurs, it would be reported to the NRC and/or Agreement States through a number of sources, but primarily through required licensee notifications. Event

notifications and preliminary notifications, which are used to widely disseminate the information to internal and external stakeholders, summarize these events. For activities of NMSS and FSME, NMED is an essential system used to collect information on such events.

The fuel cycle, materials, high-level waste repository, decommissioning, and spent fuel storage and transportation inspection programs are key elements in verifying the completeness and accuracy of licensee reports. The IMPEP also provides a mechanism to verify that Agreement States and NRC regions are consistently collecting and reporting such events as received from the licensees and are entering them in NMED.

The NRC has taken a number of steps to improve the timeliness and completeness of materials event data. These steps include assessment of the NMED data during monthly staff reviews; emphasis and analysis during the IMPEP reviews; NMED training in headquarters, the regions, and Agreement States; and discussions at all Agreement State and CRCPD meetings.

***Validation:*** There is a logical basis for using events involving radiation exposures to the public and occupational workers from radioactive material that exceed AO Criterion I.A as a performance measure for ensuring the protection of public health and safety. An event is considered an AO if it is determined to be significant from the standpoint of public health or safety. The NRC's regulatory process—including licensing, inspection, guidance, regulations, and enforcement activities—is designed to mitigate the likelihood of an event that would exceed AO Criteria I.A.

Events of this magnitude are rare. In the unlikely event that an AO occurs, NRC or Agreement State technical specialists, with input from expert consultants as necessary, will confirm whether the criteria were met.

The NRC believes that the data collected to meet this performance measure are free from bias. NMSS and FSME do not use statistical sampling of data to determine results. Rather, they review all event data to determine whether the performance measure has been met.

Two important data limitations in determining this performance measure are the delay time for receiving information and/or the failure of the NRC to become aware of an event that causes significant radiation exposures to the public or occupational workers. Although NMSS and FSME procedures and NRC regulations associated with event reporting include specific requirements for timely notifications, a lag time separates the occurrence of an event and the known consequences of that event.

The NRC believes that the probability of being unaware of an event that causes significant radiation exposures to the public or occupational workers is very small. Periodic licensee inspections and regulatory reporting requirements are sufficient to ensure that an event of this magnitude would become known.

If such an event occurs, it would result in a prompt and thorough investigation of the event, its consequences, its root causes, and the necessary actions by the licensee and the NRC to mitigate the situation and prevent recurrence. In addition to these immediate actions, the NRC holds periodic meetings where staff and management validate the occurrence of these events.

- ***Number of radiological releases to the environment that exceed applicable regulatory limits, with a materials safety target of less than or equal to 5 and a waste safety target of 0***

***Verification:*** This performance measure is defined as any release to the environment from fuel cycle, materials, high-level waste repository, decommissioning, and spent fuel storage and transportation activities that exceeds applicable regulations, as defined in 10 CFR 20.2203(a)(3). A 30-day written report is required regarding such releases. The nuclear materials safety performance measure target is less than or equal to five releases a year that meet this reporting criteria. The nuclear waste safety target is no releases that meet this reporting criteria.

If an event meeting this threshold occurs, it would be reported to the NRC and/or Agreement States through a number of sources, but primarily through required licensee notifications. Event notifications and preliminary notifications, which are used to widely disseminate the information to internal and external stakeholders, summarize these events. For activities of NMSS and FSME, NMED is an essential system used to collect information on such events.

The fuel cycle, materials, high-level waste repository, decommissioning, and spent fuel storage and transportation inspection programs are key elements in verifying the completeness and accuracy of licensee reports. The IMPEP also provides a mechanism to verify that Agreement States and NRC regions are consistently collecting and reporting such events as received from the licensees and entering them in NMED.

The NRC has taken a number of steps to improve the timeliness and completeness of materials event data. These steps include assessment of NMED data during monthly staff reviews; emphasis and analysis during the IMPEP reviews; NMED training in headquarters, the regions, and Agreement States; and discussions at all Agreement State and CRCPD meetings.

***Validation:*** The regulations in 10 CFR Part 20 provide standards for protection against radiation. There is a logical basis for tracking releases subject to the 30-day reporting requirement under 10 CFR 20.2203(a)(3)(ii) as a performance measure for ensuring the protection of the environment. The NRC's regulatory process—including licensing, inspection, guidance, regulations, and enforcement activities is sufficient to ensure that releases of radioactive materials that exceed regulatory limits are infrequent.

In the unlikely event that a release to the environment exceeds regulatory limits, the NRC or Agreement State technical specialists, with input from expert consultants as necessary, will confirm whether the criteria were met.

The NRC believes that the data collected to meet this performance measure are free from bias. NMSS and FSME do not look at statistical sampling of data to determine results. Rather, they review all event data to determine whether the performance measure has been met.

Two important data limitations in determining this performance measure are the delay time for receiving information and/or the failure of the NRC to become aware of an event that causes environmental impacts. Although NMSS and FSME procedures and NRC regulations associated with event reporting include specific requirements for timely notifications, a lag time separates the occurrence of an event and the known consequences of that event.

The NRC believes that the probability of being unaware of an event that causes a radiological release to the environment that exceeds applicable regulations is very small. Periodic licensee inspections and regulatory reporting requirements are sufficient to ensure that an event of this magnitude would become known.

If such an event occurs, it would result in a prompt and thorough investigation of the event, its consequences, its root causes, and the necessary actions by the licensee and the NRC to mitigate the situation and prevent recurrence. In addition to these immediate actions, the NRC holds periodic meetings where staff and management validate the occurrence of these events.

## Goal 2—Security: Ensure the secure use and management of radioactive materials

***Strategic Outcome***

- ***No instances where licensed radioactive materials are used domestically in a manner hostile to the security of the United States***

***Performance Measures***

- ***Unrecovered losses or thefts of risk-significant radioactive sources is 0.***

Under FY 2007 AO Criterion I.C.1, the agency counts any unrecovered lost, stolen, or abandoned sources that exceed the values listed in Appendix P, "Category 1 and 2 Radioactive Material," to 10 CFR Part 110, "Export and Import of Nuclear Equipment and Material." Excluded from reporting under this criterion are those events involving sources that are lost, stolen, or abandoned under certain conditions, specifically (1) sources abandoned in accordance with the requirements of 10 CFR 39.77(c), (2) sealed sources contained in labeled, rugged source housings, (3) recovered sources with sufficient indication that doses in excess of the reporting thresholds specified in AO Criteria I.A.1 and I.A.2 did not occur during the time the source was missing, (4) unrecoverable

sources lost under such conditions that doses in excess of the reporting thresholds specified in AO Criteria I.A.1 and I.A.2 were not known to have occurred, and (5) other sources that are lost or abandoned and declared unrecoverable; for which the agency has determined that the risk-significance of the source is low based on the location (e.g., water depth) or physical characteristics (e.g., half life, housing) of the source and its surroundings; where all reasonable efforts have been made to recover the source; and where it has been determined that the source is not recoverable and would not be considered a realistic safety or security risk under this measure.

***Verification:*** Losses or thefts of radioactive material that are greater than or equal to 1000 times the quantity specified in Appendix C, "Quantities of Licensed Material Requiring Labeling," to 10 CFR Part 20 must be reported (per 10 CFR 20.2201(a)) by telephone to the NRC Headquarters Operations Center or Agreement State immediately (interpreted as within 4 hours) if the licensee believes that an exposure could result to persons in unrestricted areas. If an event meeting the thresholds described above occurs, it would be reported through a number of sources, but primarily through this required licensee notification. Events that are publicly available are then entered and tracked in NMED, which is an essential system used to collect and store information on such events. Separate methods are used to track events that are not publicly available. Additionally, licensees must meet the reporting and accounting requirements in 10 CFR Part 73, "Physical Protection of Plants and Materials," and 10 CFR Part 74, "Material Control and Accounting of Special Nuclear Material."

The NRC's inspection programs are key elements in verifying the completeness and accuracy of licensee reports. The IMPEP also provides a mechanism to verify that Agreement States and NRC regions are consistently collecting and reporting such events as received from the licensees and are entering these events in NMED. In some cases, upon receiving a report, the NRC or Agreement State initiates an independent investigation that verifies the reliability of the reported information. When performed, these investigations enable the NRC or Agreement State to verify the accuracy of the reported data.

The regulation in 10 CFR 20.2201(b) requires a 30-day written report for lost or stolen sources that are greater than or equal to 10 times the quantity specified in Appendix C to 10 CFR Part 20 if the source is still missing at that time. In addition, 10 CFR 20.2201(d) requires an additional written report within 30 days of a licensee learning any additional substantive information. The NRC interprets this requirement as including reporting recovery of sources.

The NRC issued guidance in the form of a regulatory information summary (RIS 2005-21) to clarify the current 10 CFR 20.2201(d) requirement for reporting recovery of a risk-significant source. FSME will ask the Agreement States to send copies of the RIS (or equivalent document) to their licensees. The NRC issued the National Source Tracking System final rule in November 2006. Implementation of this system will create and maintain an inventory of risk-significant sources. This rulemaking codifies and clarifies reporting requirements for risk-significant sources (including reporting timeframes) by adding specific requirements to 10 CFR 20.2201, "Reports of Theft or Loss

of Licensed Material," for risk-significant sources, including a requirement for licensees to report the recovery of a risk-significant source within 30 days of recovery. In conjunction with this rulemaking, FSME will modify its Procedure SA-300 to specifically require Agreement States to report the recovery of a risk-significant source immediately to the NRC Headquarters Operations Center when notified by a licensee.

***Validation:*** Events collected under this performance measure are actual losses, thefts, or diversions of materials described above. Such events could compromise public health and safety, the environment, and the common defense and security. Events of this magnitude are expected to be rare. The information reported under 10 CFR Part 73 and 10 CFR Part 74 is required so that the NRC is aware of events that could endanger public health and safety or national security. Any failures at the level of the strategic plan would result in immediate investigation and followup.

If an event subject to the reporting requirements described above occurs, it would result in a prompt and thorough investigation of the event, its consequences, its root causes, and the necessary actions by the licensee, the NRC, and/or an Agreement State to mitigate the situation and prevent recurrence.

- ***Number of substantiated cases of actual theft or diversion of licensed risk-significant radioactive sources or a formula quantity of special nuclear material or act that results in radiological sabotage is 0.***

***Verification:*** In FY 2007 AO Criterion I.C.2, "substantiated" means a situation that requires additional action by the agency or other proper authorities because of an indication of loss, theft, or unlawful diversion—such as an allegation of diversion, report of lost or stolen material, statistical processing difference, or other indication of loss of material control or accountability—that cannot be refuted following an investigation. A formula quantity of special nuclear material is defined in 10 CFR 70.4, "Definitions." Radiological sabotage is defined in 10 CFR 73.2, "Definitions." Licensees subject to the requirements of 10 CFR Part 73 must call the NRC within 1 hour of an occurrence, to report any breaches of security or other event that may potentially lead to theft or diversion of material or to sabotage at a nuclear facility. The NRC's safeguards requirements are described in 10 CFR 73.71, "Reporting of Safeguards Events"; Appendix G, "Reportable Safeguards Events," to 10 CFR Part 73; and 10 CFR 74.11, "Reports of Loss or Theft or Attempted Theft or Unauthorized Production of Special Nuclear Material." The information assessment team composed of NRC Headquarters and regional staff members would conduct an immediate assessment for any significant events to determine any further actions that are needed, including coordination with the intelligence community and law enforcement. In accordance with 10 CFR 73.71(d), the licensee must also file a written report within 60 days of the incident describing the event and the steps that the licensee took to protect the nuclear facility. This information will enable the NRC to adequately assess whether radiological sabotage has occurred.

***Validation:*** Events subject to reporting requirements are those that endanger the public health and safety and the environment through deliberate acts of theft or diversion of material or through sabotage directed against the nuclear facilities that the agency licenses. Events of this type are extremely rare. If such an event occurs, it would result in a prompt and thorough investigation of the event, its consequences, its root causes, and the necessary actions by the licensee and/or the NRC to mitigate the situation and prevent recurrence. The investigation ensures the validity of the information and assesses the significance of the event.

- ***Number of substantiated losses of a formula quantity of special nuclear material or substantiated inventory discrepancies of a formula quantity of special nuclear material that are judged to be significant relative to normally expected performance or regulatory limits and that are judged to be caused by theft or diversion or substantial breakdown of the accountability system is 0.***

***Verification:*** Licensees must record events associated with FY 2007 AO Criterion I.C.3 within 24 hours of the identified event in a safeguards log maintained by the licensee. The licensee must retain the log as a record for 3 years after the last entry is made or until termination of the license. The NRC relies on its safeguards inspection program to ensure the reliability of recorded data. The NRC makes a determination of whether a substantiated breakdown has resulted in a vulnerability to radiological sabotage, theft, diversion, or unauthorized enrichment of special nuclear material. When making substantiated breakdown determinations, the NRC evaluates the materials event data to ensure that licensees are reporting and collecting the proper event data.

***Validation:*** "Substantiated" means a situation that requires additional action by the agency or other proper authorities because of an indication of loss, theft, or unlawful diversion—such as an allegation of diversion, report of lost or stolen material, statistical processing difference, other system breakdown closely related to the material control and accounting program (such as an item control system associated with the licensee's facility information technology system), or other indication of loss of material control or accountability—that cannot be refuted following an investigation. A formula quantity of special nuclear material is defined in 10 CFR 70.4. Events collected under this performance measure may indicate a vulnerability to radiological sabotage, theft, diversion, or loss of special nuclear materials. Such events could compromise public health and safety, the environment, and the common defense and security. The NRC relies on its safeguards inspection program to help validate the reliability of recorded data and determine whether a breakdown of a physical protection or material control and accounting system has actually resulted in a vulnerability.

- ***Number of substantial breakdowns of physical security or material control (i.e., access control containment or accountability systems) that significantly weaken the protection against theft, diversion, or sabotage is 0.***

***Verification:*** For FY 2007 AO Criterion I.C.4, a "substantial breakdown" is defined as a red finding in the security oversight program or significant performance problems and/or operational events resulting in a determination of overall unacceptable performance or in a shutdown condition (inimical to the effective functioning of the Nation's critical infrastructure). Radiological sabotage is defined in 10 CFR 73.2. Licensees are required to report to the NRC, immediately after the occurrence becomes known, any known breakdowns of physical security, based on the requirements in 10 CFR 73.71 and Appendix G to 10 CFR Part 73. If a licensee reports such an event, the headquarters operations officer prepares an official record of the initial event report. The NRC begins responding to such an event immediately upon notification, with the activation of its information assessment team. A licensee must follow its initial telephone notification with a written report submitted to the NRC within 30 days.

The licensee records breakdowns of physical protection resulting in a vulnerability to radiological sabotage, theft, diversion, or loss of special nuclear materials or radioactive waste within 24 hours in a safeguards log maintained by the licensee. The licensee must retain the log as a record for 3 years after the last entry is made or until termination of the license. Licensees subject to 10 CFR Part 73 must also meet the reporting requirements detailed in 10 CFR 73.71. The NRC evaluates all of the reported events based on the criteria in 10 CFR 73.71 and Appendix G to 10 CFR Part 73. The NRC also maintains and relies on its safeguards inspection program to ensure the reliability of recorded and reported data.

***Validation:*** Events assessed under this performance measure are those that threaten nuclear activities by deliberate acts, such as radiological sabotage, directed against facilities. If a licensee reports such an event, the information assessment team evaluates and validates the initial report and determines any further actions that may be necessary. Tracking breakdowns of physical security indicates whether the licensee is taking the necessary security precautions to protect the public, given the potential consequences of a nuclear accident attributable to sabotage or the inappropriate use of nuclear material either in this country or abroad.

Events collected under this performance measure may indicate a vulnerability to radiological sabotage, theft, diversion, or loss of special nuclear materials or radioactive waste. Such events could compromise public health and safety, the environment, and the common defense and security. The NRC relies on its safeguards inspection program to help validate the reliability of recorded data and determine whether a breakdown of a physical protection or material control and accounting system has actually resulted in a vulnerability.

- ***Number of significant unauthorized disclosures (loss, theft, and/or deliberate acts) of classified and/or safeguards information is 0.***

***Verification:*** With regard to FY 2007 AO Criterion I.C.5, any alleged or suspected violations by NRC licensees of the Atomic Energy Act, Espionage Act, or other Federal statutes related to classified or safeguards information must be reported to the NRC under the requirements of 10 CFR 95.57(a) (for classified information), 10 CFR Part 73 (for safeguards information), and NRC orders

(for safeguards information subject to modified handling requirements). However, for performance reporting, the NRC would only count those disclosures or compromises that actually cause damage to the national security or to public health and safety. Such events would be reported to the cognizant security agency (i.e., the security agency with jurisdiction) and the regional administrator of the appropriate NRC regional office, as listed in Appendix A, "U.S. Nuclear Regulatory Commission Offices and Classified Mailing Addresses," to 10 CFR Part 73. The regional administrator would then contact the Division of Security Operations at NRC Headquarters, which would assess the violation and notify other NRC offices and other Government agencies, as appropriate. A determination would be made as to whether the compromise damaged the national security or public health and safety. Any unauthorized disclosures or compromises of classified or safeguards information that damage the national security or public health and safety would result in immediate investigation and followup by the NRC. In addition, NRC inspections will verify that licensees' routine handling of classified and safeguards information (including safeguards information subject to modified handling requirements) conforms to established security information management requirements.

- ***Any alleged or suspected violations of this performance measure by NRC employees, contractors, or other personnel would be reported in accordance with NRC procedures to the Director of Division of Facilities and Security at NRC Headquarters. The NRC maintains a strong system of controls over national security and safeguards information, including (1) annual required training for all employees, (2) safe and secure document storage, and (3) physical access control in the form of guards and badged access.***

***Validation:*** Events collected under this performance measure are unauthorized disclosures of classified or safeguards information that damage the national security or public health and safety. Events of this magnitude are not expected and would be rare. If such an event occurs, it would result in a prompt and thorough investigation, including consequences, root causes, and necessary actions by the licensees and the NRC to mitigate the consequences and prevent recurrence. NRC investigation teams also validate the materials event data to ensure that licensees are reporting and collecting the proper event data.

## Goal 3—Openness: Ensure openness in our regulatory process

***Strategic Outcome***

- ***Stakeholders are informed and involved in NRC processes as appropriate***

***Performance Measures***

The results of this approach could be used to determine any changes to consider related to interactions with, and information provided to, those stakeholder groups.

- ***Percentage of selected openness output measures that achieve performance targets is equal to or greater than 78 percent.***

***Verification:*** The NRC views nuclear regulation as the public's business and, as such, it should be transacted openly and candidly to maintain the public's confidence. The goal of ensuring openness explicitly recognizes that the public must be informed about, and have a reasonable opportunity to participate meaningfully in, the NRC's regulatory processes. In assessing how the NRC will gauge its openness with stakeholders, the agency will (1) provide accurate and timely information to the public about the uses and risks of radioactive materials, (2) enhance awareness of the NRC's independent role in protecting public health and safety and the environment, (3) provide accurate and timely information about the safety performance of the licensees regulated by the NRC, (4) furnish a fair and timely process to allow public involvement in NRC decisionmaking in matters not involving sensitive unclassified, safeguards, classified, or proprietary information, (5) provide a fair and timely process to allow authorized (appropriately cleared with a need to know) stakeholders to participate in NRC decisionmaking in matters involving sensitive unclassified, safeguards, classified, or proprietary information, and (6) obtain early public involvement on issues most likely to generate substantial interest as well as promote two-way communication to enhance public confidence in the NRC's regulatory processes.

***Validation:*** Overall actual performance will be measured by determining the percentage of the associated output measures that delivered their intended openness outcome. At a minimum, to meet the overall target, 78 percent of the output measure targets must be met.

The process of collecting the data and making sure that the information is complete, accurate, and consistent will be the responsibility of the individual office director who will review and approve the data submitted by the staff.

## Goal 4—Effectiveness: Ensure that NRC actions are effective, efficient, realistic, and timely

***Strategic Outcome***

- ***No significant licensing or regulatory impediments to the safe and beneficial uses of radioactive materials***

***Performance Measures***

- ***Percentage of selected processes that deliver desired efficiency improvement is greater than 70 percent, with a goal of more than 90 percent by 2008.***

***Verification:*** The NRC faces challenges at a time when initiatives such as the Government Performance and Results Act are charging Federal agencies to become more effective and efficient and to justify their budget requests with demonstrated program results. The drive to improve performance in Government, coupled with increasing demands on the NRC's finite resources, clearly indicates a need for the agency to become more effective and efficient. The NRC has established a performance measure to improve desired efficiency that supports the two primary goals of safety and security and also addresses management excellence.

Each year, the agency would select candidate processes as part of this performance measure. For the purposes of this measure, a desired efficiency improvement is defined as an improvement or positive change in the process's cost, quality, productivity, and/or timeliness. A desired efficiency improvement would be expressed as resource savings or cost avoidance for the agency or as a positive benefit to external stakeholders with respect to effectiveness, efficiency, or realism.

Offices will use the following four steps to identify and report on desired efficiency improvements:

(1) Select and define a candidate process. Offices will identify processes at the beginning of each fiscal year that they will measure for desired efficiency improvement.

(2) Analyze the process for areas in need of improvement. This could include cost reduction, quality and or timeliness of work, or other unique factors as appropriate that can be measured for desired efficiency improvement.

(3) Establish targets for efficiency improvements. On the basis of past experience and any available previous trend data, offices will identify specific desired targets that are challenging, but can be achieved. The targets could involve improvements in cost, quality, productivity, and/or timeliness.

(4) Report progress annually. Offices will report the actual data at the end of each fiscal year and may adjust the target accordingly based on the previous year's results.

***Validation:*** Overall actual performance will be measured by determining the percentage of the processes selected annually that delivered their intended desired efficiency improvements. At a minimum, 70 percent of the selected processes must have achieved their targets.

The process of collecting the data and making sure that the information is complete, accurate, and consistent will be the responsibility of the individual office director who will review and approve the data submitted by the staff.

- ***No more than one instance per program when licensing or regulatory activities unnecessarily impede the safe and beneficial uses of radioactive materials, with a target for the reactor program of 2 (1 per Tier II program) and a target for the materials/waste program of 5 (1 per Tier II program)***

***Verification and Validation:*** This measure is intended to serve as a precursor to the strategic-level outcome of no significant licensing or regulatory impediments to the safe and beneficial uses of radioactive materials. The measure will provide an indication of overall agency performance with respect to the strategic objective of enabling the safe use of radioactive materials for beneficial civilian purposes. The table below describes how the agency fulfills its "enabling" role at various phases of the business cycle.

| | **Potential Applicants** | **Applicants** | **Current Licensees** |
|---|---|---|---|
| **Intent of "enabling" in each category** | Provide an effective and efficient regulatory infrastructure so that this group is inclined to pursue licenses if they so choose. Ensure that the NRC is not a barrier to entry because of unnecessary regulatory burden. | Provide stable and predictable processes so that applicants can enter the business in a timely fashion, constrained only by their ability to operate safely and securely (i.e., abide by NRC regulations). | Ensure that the regulation does not pose an unnecessary regulatory burden. |

The key difference between this performance measure and the related strategic outcome is that the strategic outcome focuses on significant impediments, while the performance measure does not contain this qualifier. Thus, the performance measure is designed to capture lower-level instances where NRC programs may have posed an unnecessary impediment. The following types of examples could count against this performance measure (and possibly against the strategic outcome as well, depending on severity):

- missing a key timeliness measure (e.g., for fuel cycle licensing actions or reactor power uprates) or milestone (e.g., completing license termination for complex decommissioning cases)

- not adjusting the regulatory framework to support new technologies or otherwise respond to significant changes in the regulatory environment

- imposing unnecessary regulatory burden on licensees or applicants to the extent that the NRC becomes a barrier to entry or sustainability

Efforts to risk-inform regulatory programs, improve programmatic effectiveness and efficiency, and reduce unnecessary regulatory burden are all positive steps that can be taken to enable the safe use of radioactive materials.

Because the NRC does not have previous experience in applying this type of measure, the metric will likely require adjustment over the first few years. The intent is to set aggressive annual targets that reflect the agency's commitment to continuous improvement. Consequently, it should be expected that some impediments will occur at the performance level because of resource limitations, emergent high-priority demands, or other circumstances beyond the control of program managers. The agency's assessment of the related strategic outcome considers exceptions reported under this measure.

## Goal 5—Management: Ensure excellence in agency management to carry out the NRC's strategic objective

***Strategic Outcomes***

- ***Continuous improvement in the NRC's leadership and management effectiveness in delivering the mission***

- ***A diverse, skilled workforce and an infrastructure that fully supports the agency's mission and goals***

***Performance Measures***

- ***Percentage of selected NRC management programs reported by support offices that delivered intended outcomes is equal to or greater than 80 percent.***

***Verification:*** The NRC considered the management and support needed to achieve the agency's mission, overcome preexisting management challenges, and implement other initiatives. This goal

includes strategies for the management of human capital, infrastructure management, improved financial performance, expanded electronic government, budget and performance integration, and internal communications. The process of collecting the data and making sure that the information is complete, accurate, and consistent will be the responsibility of the individual office director who will review and approve the data submitted by the staff.

***Validation:*** Overall actual performance will be measured by determining the percentage of the five programs that delivered their intended management outcomes; at a minimum, to meet the overall target of 90 percent, all five programs must achieve an average score of 90 percent of the activity targets.

- ***Percentage of selected processes reported by support offices that deliver desired efficiency improvement is equal to or greater than 90 percent, with a goal of more than 90 percent by 2008.***

***Verification:*** The NRC faces challenges at a time when initiatives such as the Government Performance and Results Act are charging Federal agencies to become more effective and efficient and to justify their budget requests with demonstrated program results. The drive to improve performance in Government, coupled with increasing demands on the NRC's finite resources, clearly indicates a need for the agency to become more effective and efficient. The NRC has established a performance measure to improve desired efficiency that supports the two primary goals of safety and security and also addresses management excellence.

Each year, the NRC will select candidate processes as part of this performance measure. For the purposes of this measure, a desired efficiency improvement is defined as an improvement or positive change in the process's cost, quality, productivity, and/or timeliness. Desired efficiency improvement would be expressed as resource savings or cost avoidance for the agency or as a positive benefit to external stakeholders with respect to effectiveness, efficiency, or realism.

Support offices will use the following four steps to identify and report on desired efficiency improvements:

(1) Select and define a candidate process. Offices will identify processes at the beginning of each fiscal year that they will measure for desired efficiency improvement.

(2) Analyze the process for areas in need of improvement. This could include cost reduction, quality and or timeliness of work, or other unique factors as appropriate that can be measured for desired efficiency improvement.

(3) Establish targets for efficiency improvements. On the basis of past experience and any available previous trend data, offices will identify specific desired targets that are

challenging, but can be achieved. The target improvements could involve cost, quality, productivity, and/or timeliness.

(4) Report progress annually. Offices will report the actual data at the end of each fiscal year and may adjust the target accordingly based on the previous year's results.

***Validation:*** Overall actual performance will be measured by determining the percentage of the processes selected annually that delivered their intended desired efficiency improvement. At a minimum, 75 percent of the selected processes must have achieved their targets.

The process of collecting the data and making sure that the information is complete, accurate, and consistent will be the responsibility of the individual office director who will review and approve the data submitted by the staff.

## MANAGEMENT CHALLENGES

This appendix lists the nine most serious management challenges facing the agency as identified by the NRC's Office of the Inspector General (OIG) in a memorandum to Chairman Dale E. Klein dated October 6, 2006 (OIG-07-A-01). The OIG defines serious management challenges that are mission critical as areas or programs that have the potential for a perennial weakness or vulnerability that, without substantial management attention, would seriously impact agency operations or strategic goals.

This appendix describes the actions that the NRC is taking to address these challenges and the related actions/milestones and schedule for overcoming the management challenges.

**CHALLENGE 1:** Protection of nuclear material used for civilian purposes.

| *Actions/Milestones* | *Schedule* |
|---|---|
| **NUCLEAR REACTOR SAFETY MAJOR PROGRAM** | |
| The NRC is reanalyzing the capabilities and physical protection requirements for NRC-licensed facilities. Representative nuclear power plant structures have been analyzed to determine their vulnerability to aircraft attack. In addition, the NRC has used a risk-informed approach to further assess the potential vulnerabilities of civilian nuclear facilities and activities to the effects of various attack scenarios. Research products will provide data to assist decisionmakers in identifying practical mitigation strategies and allocating resources.<br><br>**Status:** The agency coordinated this assessment with its counterparts at the Homeland Security Council, Department of Homeland Security (DHS), Federal Bureau of Investigation, Department of Energy (DOE), Defense Threat Reduction Agency, Department of Defense, and other agencies. The staff is pursuing a number of additional efforts related to generic issues to support the security assessments. Specifically, these efforts include site-specific aircraft impact vulnerability analysis, cyber threat analysis, research on terrorist attack scenarios, effects of fire analysis, small arms conflict situation analysis, radiological consequences from attacks on nuclear power plants, protective strategies for attacks on nuclear power plants, spent fuel testing, and characterization of insider threats. These efforts will continue to provide the technical basis for any new or revised mitigative measures for protecting radioactive materials and facilities. | FY 2007 |
| The NRC will accelerate the conduct of inspections to validate commercial power reactor licensee material control and accounting of special nuclear material. The NRC will also enhance regulatory guides (RGs), conduct an industry workshop, update guidance, and issue revisions to existing NRC Inspection Manual chapters to enhance regulatory oversight of commercial power reactors and improve licensee understanding of regulatory requirements to help ensure the secure use of radioactive materials.<br><br>**Status:** The staff plans to complete all Phase II inspections by September 1, 2007. | FY 2007 |

| *Actions/Milestones* | *Schedule* |
|---|---|
| **NUCLEAR MATERIALS AND WASTE SAFETY MAJOR PROGRAM** | |
| The NRC will conduct or support the following efforts: | FY 2007 |
| • Continue to evaluate the impacts of the results from the studies of the consequences from (1) potential terrorist attacks to selected transportation packages (nonspent fuel and spent fuel) and selected spent fuel storage casks and (2) the consequences of an irradiator explosion. | |
| • Continue to support the comprehensive safeguards and security assessments performed by DHS of fuel cycle and materials licensees, spent fuel and nonspent fuel transportation packages, and spent fuel storage casks. | |
| • Issue regulatory improvements to address any significant weaknesses identified during the security assessments. | |
| • Review facility security plans to ensure that the facilities protect against identified threats. | |
| • Require remaining materials licensees to implement appropriate compensatory measures. Review licensee compliance with the interim compensatory measures and assess proposals to revise regulatory requirements (e.g., rulemaking, orders) and generic communication (e.g., information notices, NUREGs) in the area of security. | |
| • Continue to participate in interagency and international efforts to address life-cycle management of radioactive sources. | |
| • Continue to increase security of export/import controls for high-risk sources. | |
| • Continue to work in conjunction with DOE to improve source tracking by developing a national Web-based system to track risk-significant radioactive sources. At the direction of the Commission, the NRC is beginning to enter data on Category 3 sources. | |

## APPENDIX V: MANAGEMENT CHALLENGES

**CHALLENGE 2:** Development and implementation of a risk-informed and performance-based regulatory approach.

| *Actions/Milestones* | *Schedule* |
|---|---|
| **NUCLEAR REACTOR SAFETY MAJOR PROGRAM**<br><br>Publish report on lessons learned from implementation of the Reactor Oversight Process.<br><br>**Status:** The staff last issued this report in SECY-05-0074, dated March 31, 2006. The staff plans to continue to perform annual self-assessments and report the results to the Commission. | FY 2007 |
| Develop a proposed rule to risk-inform 10 CFR 50.46, "Acceptance Criteria for Emergency Core Cooling Systems for Light-Water Nuclear Power Reactors."<br><br>**Status:** The staff expects to deliver the draft final rule to the Commission by February 2007. The staff also plans to complete the safety evaluation of the boiling-water reactor loss-of-coolant accident/loss of offsite power exemption request topical in June 2007. | FY 2007 |
| Issue Revision 1 to RG 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis."<br><br>**Status:** Following completion and publication of the next revision to RG 1.200, "An Approach for Determining the Technical Adequacy of Probabilistic Risk Assessment Results for Rick-Informed Activities" (scheduled for issuance in FY 2007), RG 1.174 will be revised to address probabilistic risk assessment (PRA) quality to be consistent with RG 1.200. | FY 2008 |
| Modify the scope of special treatment requirements and submit the final rule (10 CFR 50.69, "Risk-Informed Categorization and Treatment of Structures, Systems, and Components for Nuclear Power Reactors") to the Commission.<br><br>**Status:** Pilot applications of 10 CFR 50.69 are expected in 2007. These pilots will be used to refine the industry guidance and to develop a submittal template, which will enhance regulatory stability for future applicants. | FY 2007 |
| Provide a draft rule to the Commission that risk-informs the pressurized thermal shock requirements in 10 CFR 50.61, "Fracture Toughness Requirements for Protection Against Pressurized Thermal Shock Events."<br><br>**Status:** The NRC will publish the technical basis reports in final form in December 2006. Based on the technical report, the staff initiated a rulemaking to implement a risk-informed revision to the pressurized thermal shock requirements in 10 CFR 50.61 in October 2005. This rulemaking concludes with provision of a revised version of 10 CFR 50.61 for Commission approval in January 2008. | FY 2007–FY 2008 |
| Issue the RG and Standard Review Plan (SRP) for the American Society of Mechanical Engineers (ASME)/American Nuclear Society (ANS) standard for PRA quality.<br><br>**Status:** ANS is scheduled to issue Revision 1 to its standard in 2007. ANS PRA standards for low power and shutdown and for internal fires are scheduled for issuance in 2007. ASME and ANS are integrating their standards into a single PRA standard that is scheduled to be issued in 2007. The staff will document its endorsement of either the integrated standard or standalone standards in Revision 2 of RG 1.200, scheduled to be completed in 2008. | FY 2007–FY 2009 |

| *Actions/Milestones* | *Schedule* |
|---|---|
| Develop a formal program plan to make a risk-informed and performance-based revision to 10 CFR Part 50, "Domestic Licensing of Production and Utilization Facilities," including revisions to the applicable RGs, SRPs, or other guidance documents. Develop an advance notice of proposed rulemaking (ANPR) to consider the spectrum of issues relating to risk-informing the reactor requirements.<br><br>**Status:** The NRC is considering modifying its approach to develop risk-informed and performance-based requirements applicable to nuclear power reactors. The NRC is considering an approach that, in addition to the ongoing effort to revise some specific regulations to make them risk informed and performance based, would establish a comprehensive set of risk-informed and performance-based requirements applicable to all nuclear power reactor technologies as an alternative to current requirements. This new rule would take advantage of operating experience, lessons learned from the current rulemaking activities, and advances in the use of risk-informed technology and would focus NRC and industry resources on the most risk-significant aspects of plant operations to better ensure public health and safety. The set of new alternative requirements would be intended primarily for new power reactors, although they would be available to existing reactor licensees.<br><br>Therefore, before determining whether to develop a proposed rule, the NRC is seeking comments on this matter from all interested persons. The Commission is requesting comments on the following specific areas:<br><br>(1) The NRC's proposed plan<br>(2) integration of safety, security, and emergency preparedness<br>(3) level of safety<br>(4) integrated risk<br>(5) Advisory Committee on Reactor Safeguards (ACRS) views on level of safety and integrated risk<br>(6) containment functional performance standards<br>(7) technology-neutral framework<br>(8) defense in depth<br>(9) single failure criterion<br>(10) continuation of individual rulemakings to risk-inform 10 CFR Part 50<br><br>At the conclusion of this ANPR phase, taking into consideration public comment, the NRC will assess whether to adjust its approach to risk-inform the requirements for nuclear power reactors, including existing and new plants. In May 2007, the staff will provide a recommendation to the Commission on a future plant licensing approach. | FY 2007–FY 2008 |
| Complete Significance Determination Process (SDP) Task Force action items and make appropriate adjustments.<br><br>**Status:** Revision 2 of the risk-informed inspection notebooks associated presolved tables are available internally on the NRC Web page. Verified and validated versions will be available to the licensees by December 31, 2006. Senior resident analysts have been trained on the presolved tables, and inspector training will be completed by December 31, 2006.<br><br>Externally, Screen to Green has been completed and will be issued as part of the next revision of Inspection Manual Chapter 0609 as an attachment to SDP Phase 2 notebooks.<br><br>Additionally, the Office of Nuclear Regulatory Research issued Volume 2 guidance as part of risk assessment of operating events for external events, including methodology to account for the risk contribution from flood, fire, seismic, and high-wind events. Region IV developed a list of best practices and seven recommendations to improve SDP timeliness. The recommendations will be incorporated into NRC processes as part of a yellow ticket. For the first time since the implementation of the Reactor Oversight Process, the agency met the SDP timeliness metric in FY 2006. | Ongoing |

| *Actions/Milestones* | *Schedule* |
|---|---|
| Risk Management Technical Specification (RMTS) Initiative 4b, "Risk-Informed Completion Times," would permit, contingent upon the results of a plant configuration risk assessment, temporary extension of the existing completion time within an limiting condition for operation using a quantitative implementation of 10 CFR 50.65(a)(4). Resolve issues related to the requests for additional information on the Industry Risk Management Guide (the RMTS Initiative 4b methodology document), the Combustion Engineering (CE) technical specification proposal (TSTF-424), and the Fort Calhoun Station (FCS) and South Texas Project (STP) pilot proposals.<br><br>**Status:** The STP and FCS Initiative 4b pilot plants have submitted revised license amendment applications that are under review. The approval of the pilot applications are dependent on the completion of a risk management guidance document that will provide requirements on the process, limits, and management of the program. The Nuclear Energy Institute is currently developing the risk management guidance document, which will require staff approval. The staff will brief the ACRS full committee on the risk management guidance document and the associated staff safety evaluation when they are completed. TSTF-424 is the generic CE plant technical specification change that FCS will implement as a pilot. The schedule is to approve and begin implementation of the RMTS Initiative 4b pilot applications during FY 2007. | FY 2007 |
| Develop a risk-informed environment for the NRC staff.<br><br>**Status:** A team of staff members from the Office of Nuclear Reactor Regulation (NRR) has developed an action plan to further NRR progress toward meeting the Commission's goals for establishing a risk-informed framework, complement the October 2005 NRR reorganization, and help address some of the negative conclusions of the 2005 OIG survey. The staff plans to take action in five areas by the end of FY 2008. These areas are qualification plans, first-line supervisor knowledge, informal training, formal training, and a Web-based community of practice. Management teams from NRR and the Office of New Reactors are currently reviewing the plan, and the expectation is that both office directors will issue it in the near future. | FY 2007–FY 2008 |
| Develop an alternative risk-informed and performance-based fire protection standard for nuclear power plants.<br><br>**Status:** The staff is undertaking two observation visits in November 2006. | FY 2007 |
| **NUCLEAR MATERIALS AND WASTE SAFETY MAJOR PROGRAM** | |
| Make use of risk insights in the regulation of high-level waste (HLW) and repository safety.<br><br>**Status:** The staff will continue to refine the NRC total-system performance assessment code to (1) facilitate calculations beyond 10,000 years, (2) incorporate proposed revisions to the regulatory requirements specified in 10 CFR Part 63, "Disposal of High-Level Radioactive Wastes in a Geologic Repository at Yucca Mountain, Nevada," (3) reflect new information gained from prelicense application activities, and (4) accommodate a review of potential DOE design changes. The staff intends to use the code to (1) focus staff prelicense application interactions with DOE, (2) refine HLW repository license application review strategies, (3) update the risk insight baseline, and (4) provide a tool for conducting a license application review. | FY 2007– FY 2008 |
| Develop and conduct training in the application of risk analysis.<br><br>**Status:** A suite of courses in risk analysis for materials and waste has been developed. The basic course, P-400, "Introduction to Risk Assessment for NMSS," will be offered semiannually (April and September) on a continuing basis. All technical staff members are required to take this course. Also included are courses in human reliability assessment and quantitative risk assessment for materials applications. Courses other than the basic P-400 in this series will be offered as needed. | Ongoing |

| *Actions/Milestones* | *Schedule* |
|---|---|
| Conduct a PRA for dry cask storage.<br><br>**Status:** This PRA study provided a method for quantifying the risks of dry cask storage of spent nuclear fuel and offers insights for improved decisionmaking. The agency has made the documentation of this PRA publically available in the Agencywide Documents Access and Management System (ADAMS). The NRC finalized and issued the PRA document as NUREG -1864 in September 2006. | Completed |
| Update and risk-inform spent fuel storage and transportation SRPs.<br><br>**Status:** A project was initiated at the end of FY 2006 to update and apply a risk-informed prioritization to the contents of the SRPs for spent fuel storage and transportation. The staff will update the storage SRP during FY 2007 and the transport SRP during FY 2008. Existing PRAs in these areas serve as starting points for risk information to support this effort. | FY 2007–FY 2008 |
| Develop and maintain a guidance document for applying a risk-informed decisionmaking process to appropriate regulatory issues in the regulation of nuclear material and waste.<br><br>**Status:** The agency will revise the draft guidance document, "Risk-Informed Decision-Making for Material and Waste Applications," in FY 2007 to reflect comments from the Advisory Committee on Nuclear Waste and the public and to incorporate lessons learned during trial applications. | FY 2007 |
| Revise Fuel Cycle Oversight Program in accordance with new 10 CFR Part 70, "Domestic Licensing of Special Nuclear Material," risk-informed regulatory requirements.<br><br>**Status:** Work continues on development and implementation of risk-informed inspections, risk significance of findings and events, and more effective and predictable assessment of licensee performance. | FY 2007–FY2008 |
| Make appropriate use of human reliability methods in the materials and waste regulatory programs.<br><br>**Status:** The NRC has been prioritizing human reliability analysis needs in the Nuclear Materials and Waste Safety program. The staff has begun developing human reliability tools and information to address a high-priority need in the area of nuclear medical devices. In addition, the staff has initiated tasks to develop human reliability tools and information to address high-priority needs in the area of spent fuel handling drops and misloads. | FY 2007–FY 2008 |
| Make use of risk insights in the regulation of industrial and medical uses of nuclear byproduct materials.<br><br>**Status:** During FY 2007, the NRC will revise NUREG-1556, "Consolidated Guidance About Materials Licenses," Volumes 9 and 13, and will develop a new Volume 21 to address radionuclide production using an accelerator. This is being done to address the new authority given by the Energy Policy Act of 2005. | FY 2007–FY 2008 |

| *Actions/Milestones* | *Schedule* |
|---|---|
| Make use of risk insights in the regulation of decommissioning.<br><br>**Status:** The NRC staff will continue regulatory improvements to resolve the issues that were identified in the staff's calendar year (CY) 2003 evaluation of implementation of 10 CFR Part 20, Subpart E, the license termination rule. These improvements better incorporate risk insights in implementing the license termination rule. The staff has begun the process for developing regulations to prevent future legacy sites and is revising the decommissioning guidance for issues such as restricted use/institutional controls, onsite disposal approvals, more realistic exposure scenarios, and the use of intentional mixing of soil. The staff conducted a decommissioning workshop to seek early licensee and other stakeholder input on the scope of this guidance. Final review guidance for institutional controls, engineered barriers, and realistic scenarios was completed in September 2006. | FY 2007–FY 2008 |

## **CHALLENGE 3:** Implementation of information resources.

| *Actions/Milestones* | *Schedule* |
|---|---|
| Define and pilot secure intranet solution that will provide the capability for NRC users to process and protect their sensitive information using the agency's network.<br><br>**Status:** Determine requirements to field secure intranet capabilities to all NRC users. Develop and implement Secure LAN Electronic Safe prototype. | FY 2007 |
| Revise ADAMS.<br><br>**Status:** Release ADAMS Version 4.5 in FY 2007 to further enhance functionality. | FY 2007 |
| Revise Electronic Information Exchange (EIE).<br><br>**Status:** The current Version 2.3 of EIE, implemented in FY 2005, is being used to support the current volume of secure document transmissions. EIE Release 2.4 is scheduled for March 2007 and will be placed on a Java 2, Enterprise Edition platform. Release 2.4 will meet and/or mitigate all security and functional issues presented in EIE Release 2.3. The HLW Licensing Support Program will require a technology upgrade to support the anticipated exponential increase in document volume.<br><br>**Status:** Implement EIE Release 2.4 in FY 2007 and Release 3.0 in FY 2008 to support increased volume resulting from the HLW proceeding. | FY 2007–FY 2008 |

**CHALLENGE 4:** Administration of all aspects of financial management. (OIG limited the aspects that it highlighted to financial reporting and effective oversight of the procurement process to eliminate fraud, waste, and abuse.)

| *Actions/Milestones* | *Schedule* |
|---|---|
| Continue to refine the pay/personnel time and labor reporting process.<br><br>**Status:** The NRC continues to oversee the operation of payroll and to work with the Department of Interior (DOI)/National Business Center (NBC) on challenges. Through one-on-one interactions with DOI/NBC and through working groups, the NRC will continue to strive for the highest quality service. | Ongoing |
| Prepare the FY 2007 financial statements by November 15, 2007, and receive an unqualified audit opinion.<br><br>**Status:** Ongoing. | Ongoing |
| Replace financial systems to include the core accounting system (currently the Federal Financial System), the license fee billing system, and the human resource management system. Implement the e-Travel system.<br><br>• Core accounting/fees<br>• T&L upgrade<br>• e-Travel<br><br>**Status:** Ongoing. | <br><br><br><br>October 2008<br>March 2008<br>December 2007 |

**CHALLENGE 5:** Communication with external stakeholders throughout NRC regulatory activities.

| *Actions/Milestones* | *Schedule* |
|---|---|
| **NUCLEAR REACTOR SAFETY MAJOR PROGRAM**<br><br>Development of a communications program for the Nuclear Reactor Safety program (NRR). One of the major goals for this communications program is to ensure openness with external stakeholders.<br><br>**Status:** Continue to implement the communications program, measure progress, and meet the performance goals (see details below). | Ongoing |
| Ensure the flow of information to and from external stakeholders located in the vicinity of local plants on issues most likely to generate substantial interest. Promote two-way communication.<br><br>**Status:** Plan public outreach meetings in the vicinity of plants to actively engage the public, particularly local residents, before the NRC takes action. | Ongoing |
| Effectively represent the NRC and its positions to external stakeholders, such as the Congress, the International Atomic Energy Agency, other Federal agencies (including the Office of Management and Budget (OMB), Office of Personnel Management (OPM), and Government Accountability Office), licensees, and the public.<br><br>**Status:** Hold annual workshops open to the public (such as the Annual Regulatory Information Conference) to bring together diverse groups of external stakeholders (including the international community) to discuss the latest trends in industry performance. | Ongoing |

| *Actions/Milestones* | *Schedule* |
|---|---|
| **NUCLEAR MATERIALS AND WASTE SAFETY MAJOR PROGRAM** | |
| Develop Transportation Communication Plan, Spent Fuel Storage Communication Plan, and Baltimore Tunnel Fire Communication Plan.<br><br>**Status:** The staff will complete the Baltimore Tunnel Fire Communication Plan in FY 2007. | FY 2007 |
| Review, update, and implement site-specific decommissioning communication plans.<br><br>**Status:** In FY 2007–FY 2008, communication plans for sites undergoing decommissioning will be reviewed quarterly for any needed updates; communication plans will be created for new sites. Potential new plans include those for Shieldalloy, Whittaker, and Hematite. | Ongoing |
| Conduct public meetings on significant issues in the fuel facility licensing and inspection program.<br><br>**Status:** Completed. | Completed |
| Make public participation in the HLW regulatory program easier by continuing to conduct public meetings in Nevada on HLW program issues.<br><br>**Status**: Continue to respond to requests from affected units of local governments for public meetings on various aspects of the HLW program. Emphasize communicating clearly with stakeholders and other interested members of the public from an agencywide perspective to ensure openness in the regulatory process. | Ongoing |
| Hold public meetings with local, State, and Federal Government entities and with international, public, and industry groups on radioactive materials, spent fuel storage, and transportation issues to respond to concerns and interests.<br><br>**Status**: Public meetings are regularly held on major rulemakings. Public meetings are regularly scheduled with key materials users program stakeholders, including, but not limited to, the following:<br><br>• State and local governments<br>• Organization of Agreement States<br>• Conference of Radiation Control Program Directors<br>• Advisory Committee on Medical Uses of Isotopes<br>• Indian tribes (e.g., Prairie Island tribe in October 2006)<br>• International stakeholders (e.g., Australian meeting in October 2006) | Ongoing |
| Post rulemakings, guidance, and meeting summaries on the agency's Web site.<br><br>**Status:** Ongoing. | Ongoing |

**CHALLENGE 6:** Ability to meet the demand for licensing new reactors.
*Note: This is a new Management Challenge identified by OIG.*

| *Actions/Milestones* | *Schedule* |
|---|---|
| The NRC staff is reviewing new reactor applications that are projected to be submitted during FY 2007 through FY 2009.<br><br>**Status:** New reactor licensing activities continue to focus on reviewing applications for design certifications and early site permits and on preparing for review of multiple combined license applications. The staff is developing the necessary strategies and plans to undertake these reviews. The staff accelerated the development of the technical infrastructure needed to complete these reviews and the regulatory infrastructure that will make the licensing process more effective and efficient. The staff continues its interactions with stakeholders to ensure openness in these activities and that any future planning reflects the most recent industry plans and schedules. | FY 2007–FY 2009 |

**CHALLENGE 7:** Ability to modify regulatory processes to meet changing environment.

| *Actions/Milestones* | *Schedule* |
|---|---|
| **NUCLEAR REACTOR SAFETY MAJOR PROGRAMS**<br><br>NRR will continue reviewing applicants' technical submittals and environmental application materials to verify the information in the renewal applications for FY 2006 and FY 2007.<br><br>**Status:** Ongoing | Ongoing |
| NRR will increase and provide for a more robust infrastructure in FY 2006 and FY 2007 to prepare for a combined license application, continue reviewing rulemaking activities for new reactor licensing processes, and continue reviewing early site permit applications in FY 2006 and FY 2007.<br><br>**Status:** The new NRR new organizational framework is flexible and will be able to support any necessary changes anticipated in FY 2007. | Ongoing |
| NRR will continue reviewing applications for power uprates and will approve them when the staff is satisfied that the plants are safe to operate at the uprated power level. As the staff completes its reviews of these power uprates, the staff will consider updating the publically available power uprate guidance documents as needed to capture lessons learned from these reviews. The next annual status report to the Commission on power uprates was due in June 2006.<br><br>**Status:** Currently, 13 power uprates are under review (4 measurement uncertainty recapture power uprates, 2 stretch power uprates, and 7 extended power uprates). The review of these 13 power uprates is ongoing and should be unaffected by the October 30, 2005, reorganization of NRR (although the NRR reorganization was designed to prepare for the anticipated increase in the new reactor licensing workload and to better align the organization for risk-informed regulation, power uprate reviews will remain a high priority in NRR). In addition, based on a June 2005 survey of licensees and information obtained since the survey, 19 additional power uprate requests will require review over the next 5 years. | Ongoing |

| *Actions/Milestones* | *Schedule* |
|---|---|
| **NUCLEAR MATERIALS AND WASTE SAFETY MAJOR PROGRAM** | |
| Interoffice communication on important issues such as HLW management and decommissioning is made more effective through the use of management boards, which meet regularly, to discuss action items, policy issues, and program direction. In addition, quarterly meetings between the Office of Nuclear Material Safety and Safeguards and the Office of Nuclear Regulatory Research are conducted to review the status of cooperative activities and discuss issues of concern.<br><br>**Status:** Ongoing. | Ongoing |
| The Offices of the General Counsel, Secretary to the Commission, Information Services, Atomic Safety Licensing Board Panel, and Nuclear Materials Safety and Safeguards cooperate to prepare for receipt of the HLW repository license application and hearing.<br><br>**Status:** Ongoing. | Ongoing |
| Participate on the agency's Research Effectiveness Review Board to ensure that the research program is effective in meeting the agency's needs.<br><br>**Status:** Ongoing. | FY 2007 |
| Review and update the list of external factors influencing NRC activities. Continue analyzing the external environment and document planning assumptions each year as part of the NRC's planning, budgeting, and performance management process.<br><br>**Status:** Ongoing. | Ongoing |

## **CHALLENGE 8**: Managing Human Capital

| *Actions/Milestones* | *Schedule* |
|---|---|
| Update the inventory of existing staff skills/knowledge annually.<br><br>**Status:** Task completed in FY 2006. Will continue annually. | Ongoing |
| Continue to implement strategies to close identified skill/knowledge gaps.<br><br>**Status:** Task completed in FY 2006. Will continue annually. | Ongoing |
| Identify new skill gaps and implement additional gap closure strategies as necessary.<br><br>**Status:** Task completed in FY 2006. Ongoing. | Ongoing |
| Use the SWP as a system for managers and supervisors to document their workforce skills/knowledge needs over the near term (0–2 years) and long term (2–5 years).<br><br>**Status:** Task completed in FY 2006. Will continue annually. | Ongoing |
| Continue to improve the capability of the NRC's workforce through training, development, and knowledge transfer.<br><br>**Status:** Task completed in FY 2006. Will continue annually. | Ongoing |

| | |
|---|---|
| Continue to offer leadership competency development programs—Senior Executive Service Candidate Development program, Leadership Potential Program, and Team Leader Development Program—for succession planning.<br><br>**Status:** Task completed in FY 2006. Conducted 2006 Leadership Potential Program. Designed and implemented a new Team Leader Development Program in FY 2006. A new ESECDP class starts in CY 2006. | Ongoing |
| Continue to improve the alignment of individual performance plans with agency strategic and performance goals.<br><br>**Status:** OPM and OMB certified the Senior Executive Service performance management system for its first 2 years of operation, but denied certification for CY 2006. The NRC has further modified its Senior Executive Service performance management system to conform more closely to OPM certification guidelines and expects to obtain certification in CY 2007. | Ongoing |
| Maintain a nuclear safety professional development program and graduate fellowship program to attract and retain entry-level hires in engineering and scientific jobs.<br><br>**Status:** Will continue annually. | Ongoing |

## **CHALLENGE 9**: Protection of information.

| ***Actions/Milestones*** | ***Schedule*** |
|---|---|
| Update Management Directive 12.6, "NRC Sensitive Unclassified Information Security Program."<br><br>**Status:** Commission approval will be needed after the Sensitive Unclassified Non-Safeguards Information (SUNSI) policy is developed before updating the management directive. The update will include the new SUNSI policy. | FY 2008 |
| Define and pilot a secure intranet solution that will provide the capability for NRC users to process and protect their sensitive information using the agency's network.<br><br>**Status:** Determine requirements to field secure intranet capabilities to all NRC users. Develop and implement SLES prototype. | FY 2006–FY 2007 |
| Conduct annual testing and/or Federal Information Security Management Act review of the management, operational, and technical security controls of all NRC major information technology systems.<br><br>**Status:** Ongoing. | Ongoing |
| Perform internal and external network security testing to protect the NRC Web site and internal networks from both internal and external unauthorized activity.<br><br>**Status:** Ongoing. | Ongoing |
| Perform biennial review of NRC offices to determine whether all systems of records and duplicate systems of records have been identified.<br><br>**Status:** Next biennial review will be completed in FY 2008. | Ongoing<br><br>FY 2008 |
| Identify how personally identifiable information is used in the NRC and develop policies and procedures to protect this information while minimizing the impact on agency operations.<br><br>**Status:** Ongoing. | Ongoing |
| Implement the new release of IPSS which was developed to ensure data integrity and security of NRC's personnel and facility security programs.<br><br>**Status**: Ongoing | FY 2007 |

## APPENDIX VI: REPORT ON DRUG TESTING

### U.S. NUCLEAR REGULATORY COMMISSION
### REPORT TO CONGRESS ON DRUG TESTING

The U.S. Congress and the U.S. Department of Health and Human Services initially approved the NRC's drug testing plan in August 1988, and the agency subsequently updated the plan in November 1997. The NRC's drug testing requirements for the nuclear industry, as imposed by agency regulations, are separate and distinct from this program, and this report does not cover them. The NRC's drug testing program under Executive Order (E.O.) 12564 includes random, applicant, voluntary, followup, reasonable suspicion, and accident-related drug testing. Testing began for non-bargaining unit employees in November 1988 and for bargaining unit employees in December 1990, after negotiation of an agreement with the National Treasury Employees Union.

During FY 2006, the NRC had approximately 1,800 employees in testing-designated positions subject to random testing. Potential selectees interviewed for positions in these categories were also subject to applicant testing.

The NRC conducted approximately 1,110 tests of all types between October 1, 2005 and September 30, 2006.

The NRC reviewed its employee drug testing records for FY 2006 and confirmed two positive drug tests. The agency suspended the subject employees' security clearances and referred the employees were referred to a drug rehabilitation assessment coordinator through the NRC Employee Assistance Program in accordance with the NRC Drug-Free Workplace Plan.

One applicant tested positive in June 2006. The NRC did not offer this applicant employment.

The NRC also completed internal quality control reviews during the past year to ensure continued fair, confidential, and effective administration of the agency's program.

The NRC bases its drug testing program on the principles and guidance provided under E.O. 12564, Public Law 100-71, U.S. Department of Health and Human Services guidelines, and Commission decisions.

## APPENDIX VI: REPORT ON DRUG TESTING

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## APPENDIX VII: SUMMARY OF REIMBURSABLE WORK AGREEMENTS

| U.S. NUCLEAR REGULATORY COMMISSION<br>SUMMARY OF REIMBURSABLE WORK AGREEMENTS[1]<br>(New Budget Authority) | | | |
|---|---|---|---|
| | **FY 2006 ($)** | **FY 2007 ($ Estimates)** | **FY 2008 ($ Estimates)** |
| **INTERNATIONAL ASSISTANCE TO FOREIGN GOVERNMENTS AND ORGANIZATIONS** | | | |
| International Invitational Travel (IAEA & various foreign governments and international organizations) | $138,000 | $80,000 | $80,000 |
| Material, Protection, Control and Accounting Assistance to Russia/NIS (DOE) | $0 | $0 | $0 |
| Support to FSAN - Licensing and Regulatory Review for U.S./Russian Plutonium Disposition (DOE) | $0 | $0 | $0 |
| Nuclear Safety Initiatives for the New Independent States (AID) | $1,615,000 | $2,000,000 | $2,000,000 |
| **ADMINISTRATIVE AGREEMENTS** | | | |
| Agreement States Training (State Governments) | $130,000 | $135,000 | $135,000 |
| Criminal History Program (Licensees) | $1,096,000 | $1,000,000 | $1,100,000 |
| Material Access Authorization Program (Licensees) | $335,000 | $350,000 | $350,000 |
| Information Access Authorization Program (Licensees) | $168,000 | $200,000 | $250,000 |
| Employee Detail - Exploration Systems Mission Directorate | $190,000 | $137,000 | $143,000 |
| Invitational Travel - American Institute for Taiwan | $3,000 | $0 | $0 |
| **OTHER AGREEMENTS** | | | |
| Mars Science Laboratory -2009 Project (NASA) | $50,000 | $100,000 | $100,000 |
| Foreign Cooperative Research Agreements (Multiple) | $1,215,000 | $2,000,000 | $2,000,000 |
| Westinghouse Cooperative Research Agreement | $0 | $0 | $0 |
| Energy Power Research Institute (EPRI) Cooperative Research Agreement | $0 | $0 | $0 |

[1] Does not include classified reimbursable work agreements.

## APPENDIX VII: SUMMARY OF REIMBURSABLE WORK AGREEMENTS

| | FY 2006 ($) | FY 2007 ($ Estimates) | FY 2008 ($ Estimates) |
|---|---|---|---|
| Foreign Research Reactor Spent Nuclear Fuel (DOE) | $135,000 | $0 | $320,000 |
| Navy Reviews (U.S. Navy) | $10,000 | $10,000 | $10,000 |
| Naval Reactors Emergent Review Items (DOE) | $0 | $0 | $0 |
| Waste Actions for Hanford (DOE) | $750,000 | $800,000 | $1,400,000 |
| Transport Package for Shipment of Tritium Producing Burnable Absorber Rods (TPBAR) (DOE) | $0 | $0 | $0 |
| Risk-Based End-States Review (DOE) | $0 | $0 | $0 |
| Incidental Waste Determinations for SRS and INEEL (DOE) | $0 | $0 | $0 |
| Next Generation Nuclear Plant Project in Idaho (DOE) | $0 | $1,750,000 | $2,250,000 |
| ISCMEM (DOE) | $10,000 | $0 | $0 |
| Report on Radiation Exposure and Support to NCRP (EPA) | $75,000 | $0 | $0 |
| **TOTAL** | **$5,920,000** | **$8,562,000** | **$10,138,000** |

## ENDNOTES

1. "Nuclear reactor accidents" are defined in the NRC Severe Accident Policy Statement as those events that result in substantial damage to the reactor fuel, whether or not serious offsite consequences occur.

2. "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.8 using the definition of the AO criteria in use as of August 31, 2004.

3. Releases that have the potential to cause "adverse environmental impacts" are those that exceed the limits for reporting abnormal occurrences as given by Abnormal Occurrence Criterion 1.B.1 (normally 5,000 times Table 2 [air and water] of Appendix B, Part 20 using the definition of AO criteria in use as of 8/31/04.)

4. This measure is the number of new red inspection findings during the fiscal year plus the number of new red performance indicators during the fiscal year. Programmatic issues at multi-unit sites that result in red findings for each individual unit are considered separate conditions for purposes of reporting for this measure. A red performance indicator and a red inspection finding that are due to an issue with the same underlying causes are also considered separate conditions for purposes of reporting for this measure. Red inspection findings are included in the fiscal year in which the final significance determination was made. Red performance indicators are included in the fiscal year in which Reactor Oversight Process external web page was updated to show the red indicator.

5. Significant Accident Sequence Precursor (ASP) events have a conditional core damage probability (CCDP) or $\Delta$CDP of > 1x $10^{-3}$. Such events have a 1/1000 ($10^{-3}$) or greater probability of leading to a reactor accident involving core damage. An identical condition affecting more than one plant is counted as a single ASP event if a single accident initiator would have resulted in a single reactor accident. One event was identified in FY 2002 as having the potential of being a significant precursor. This precursor involved a reactor pressure vessel head degradation at Davis-Besse. The detailed ASP Program preliminary analysis of this complex event was completed in September 2004 and is undergoing peer review. Based on the screening and engineering evaluation of FY 2002, FY 2003, and FY 2004 events, no other potentially significant precursor were identified. Therefore, the second performance measure was not exceeded for FY 2002, FY 2003, and FY 2004.

**ENDNOTES**

6. This measure is the number of plants that have entered the Manual Chapter 0350 process, the multiple/repetitive degraded cornerstone column, or the unacceptable performance column during the fiscal year (i.e., were not in these columns or process the previous fiscal year). Data for this measure is obtained from the NRC external web Action Matrix Summary page, that provides a matrix of the five columns with the plants listed within their applicable column and notes the plants in the Manual Chapter 0350 process. For reporting purposes, plants that are the subject of an approved deviation from the Action Matrix are included in the column or process in which they appear on the web page. The target value is set based on the expected addition of several indicators and a change in the long-term trending methodology (which will no longer be influenced by the earlier data and will be more sensitive to changes in current performance).

7. Considering all indicators qualified for use in reporting.

8. Beginning in FY 2005, this measure is based upon Abnormal Occurrence Criteria 1.A. Prior to FY 2005, the criteria was based upon a higher threshold of significant functional damage to organs or physiological systems. Using the pre-FY 2005 criteria, NRC reported zero events through FY 2004. However, it should be noted that if the FY 2005 performance measure, based upon Abnormal Occurrence Criteria 1.A., had been in place in FY 2003, two materials events would have been reported for that fiscal year.

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

10. With no event exceeding Abnormal Occurrence Criterion 1.B.1.

11. "Risk-significant" is defined as any unrecovered lost or abandoned sources that exceed the values listed in "Appendix P to 10 CFR Part 110--High Risk Radioactive Material, Category 2." Excluded from reporting under this criterion are those events involving sources that are lost or abandoned under the following conditions: (1) sources abandoned in accordance with the requirements of 10 CFR 39.77(c); (2) recovered sources with sufficient indication that doses in excess of the reporting thresholds specified in AO criteria I.A.1 and I.A.2 did not occur during the time the source was missing; (3) unrecoverable sources lost under such conditions that doses in excess of the reporting thresholds specified in AO criteria I.A.1 and I.A.2 were not known to have occurred, and (4) other sources that are lost or abandoned and declared unrecoverable; (5) for which the Agency has made a determination that the risk-significance of the source is low based upon the location (e.g. water depth) or physical characteristics (e.g. half life, housing) of the source and its surroundings; (6) where all reasonable efforts have been made to recover the source; and (7) it has been determined that the source is not recoverable and will not be considered a realistic safety or security risk under this measure.

12. "Substantiated" means a situation where an indication of loss, theft or unlawful diversion such as: an allegation of diversion, report of lost or stolen material, statistical processing difference, or other indication of loss of material control or accountability cannot be refuted following an investigation; and requires further action on the part of the Agency or other proper authorities.

13. A formula quantity of special nuclear material is defined in 10 CFR 70.4.

14. "Radiological sabotage" is defined in 10 CFR 73.2.

15. Security goal performance measures 2, 3, and 4 together encompass the discontinued performance measure "Number of security events and incidents that exceed the Abnormal Occurrence Criteria I.C 2-4" to provide greater clarity and detail.

16. A "substantial breakdown" is defined as a red finding in the security inspection program, or any plant or facility determined to have overall unacceptable performance, or in a shutdown condition (inimical to the effective functioning of the nation's critical infrastructure) as a result of significant performance problems and/or operational events.

17. "Significant unauthorized disclosure" is defined as a disclosure that harms national security or public health and safety.

18. "Processes" are defined as a detailed set of activities that result in a clearly defined output.

19. Compared to the average of cases where the initial enforcement action was issued during FY 2001 and FY 2002 to those issued in FY 2006 and FY 2007.

20. OIG products are issued OIG reports by the audit unit, an audit report or evaluation; or by the investigative unit, an investigation, Event Inquiry, or a special inquiry. Activities are OIG hotline activities or proactive investigative reports.

21. Congress left the determination and threshold of what constitutes a most serious challenge to the discretion of the Inspectors General. As a result, OIG applied the following definition: Serious management challenges are mission-critical areas or programs that have a potential for a perennial weakness or vulnerability that, without substantial management attention, would seriously impact agency operations or strategic goals.

**ENDNOTES**

22. High impact is the effect of an issued report or activity undertaken that results in: a) confirming risk areas or management challenges that caused the agency to take corrective action, b) real dollar savings or reduced regulatory burden, c) identifying significant wrongdoing by individuals that results in criminal or administrative action, d) clearing an individual wrongly accused, and e) identifying regulatory actions or oversight that may have contributed to the occurrence of a specific event or incident or resulted in a potential adverse impact on public health or safety.

23. Three (3) recommendations involving byproduct materials have not been agreed to by the agency and are working their way through the impasse resolution process.

24. The agency has extended the time required to complete final action on identified deficiencies in its incident response program.

25. The agency is taking longer to complete final action on FISMA recommendations.

26. Majority of these audit recommendations deal with FISMA and a specific computer-based security program that will take a lengthy time to complete final actions. For example, the agency will not be able to complete its certification and accreditation efforts before 2009.

27. Final action on recommendations in the Financial Statements audit took 16 months to complete.

28. The OIG Management and Operational Support staff consists of senior managers, a general counsel, and administrative support personnel. To carry out the function of this program for FY 2008, OIG estimates its costs to be $1.312 million, which includes salaries and benefits for eight FTE. The associated FTE and salaries and benefits estimate were equally divided between the Audits and Investigative programs. The contract support and travel estimates for information technology, travel, training, and technical support were divided by a FTE ratio to Audits and Investigations programs. Contract support and travel estimate for office supplies was divided equally between Audits and Investigations programs.

NRC - Nuclear Regulatory Commission

CR - Continuing Resolution

FY - Fiscal Year

H.R. - House of Representatives

S&E - Salaries and Benefits

OIG - Office of the Inspector General

P.L. - Public Law

COL - Combined Construction and Operating License

FTE - Full-time Equivalents

NGNP - Next Generation Nuclear Plant

MC&A - Material Control and Accounting

NSTS - National Source Tracking System

UMTRCA - Uranuim Mill Tailings Radiation Control Act

LLW - Low Level Waste

WIR - Waste Incidential to Reprocessing

## PROPOSED FISCAL YEAR 2008 APPROPRIATIONS LEGISLATION

FY - Fiscal Year

AEC - Atomic Energy Commission

NDAA - Ronald W. Reagan National Defense Authorization Act

P.L. - Public Law

## NUCLEAR REACTOR SAFETY

NRC - Nuclear Regulatory Commission

DHS - Department of Homeland Security

FTE - Full-time Equivalent

DOE - Department of Energy

PART - Program Assessment Rating Tool

SER - Safety Evaluation Report

EIS - Environmental Impact Statement

RAI - Request for Additional Information

ESP - Early Site Permit

FSER - Final Safety Evaluation Report

ESBWR - Economic Simplified Boiling Water Reactor

FDA - Final Design Approval

## ACRONYM LIST

EPR - Evolutionary Power Reactor

MDEP - Multinational Design Evaluation Report

NEA - Nuclear Energy Act

FEMA - Federal Emergency Management Agency

ROP - Reactor Oversight Program

IAEA - International Atomic Energy Agency

PA - Planned Activity

ANPR - Advanced Notice of Proposed Rulemaking

RTR - Research and Test Reactors

SDP - Significant Determination Process

SERD - Significance and Enforcement Review Process

DOJ - Department of Justice

MSPI - Mitigating System Performance Index

SSU - Safety System Unavailability

CY - Calendar Year

IMC - Inspection Manual Chapter

MPAs - Multi-plant Actions

## NUCLEAR MATERIALS AND WASTE SAFETY

HLW - High Level Waste

NSTS - National Source Tracking System

MOX - Mixed Oxide

LES - Louisiana Energy Services

NMSS - Nuclear Materials Safety & Safeguards

IMC - Inspection Manual Chapter

CBP - U.S. Customs and Border Protection

TAD - Transport, Aging & Disposal

LSN - Licensing Support Network

NMA - National Mining Association

ISL - In situ leach

ISFSI - Independent Spent Fuel Storage Installation

## PERFORMANCE MEASUREMENT

PAR - Performance and Accountability Report

FISMA - Federal Information Security Management Act

## OFFICE OF INSPECTOR GENERAL

IG - Inspector General

OIG - Office of the Inspector General

IPSS - Integrated Personnel Security System

SSC - System Structure and Components

OGC - Office of General Counsel

ABC - American Broadcasting Company

ICM - Interim Compensatory Measures

MIS - Management and Information System

## APPENDIX III

EA - Enterprise Architecture

## APPENDIX IV

ASP - Accident Sequence Precursor

NMED - Nuclear Material and Events Database

CRCPD - Conference of Radiation Control Program Directors

## APPENDIX V

PRA - Probabilistic Risk Assessment

ANS - American Nuclear Society

ASME - American Society Mechanical Engineers

EIE - Electronic Information Exchange

SUNSI - Sensitive Unclassified Non-Safeguards Information

## APPENDIX VI

EO - Executive Order

## APPENDIX VII

IAEA - International Atomic Energy Agency

NIS - Newly Independent States

DOE - Department of Energy

FSAN - Federal Environmental, Industrial and Nuclear Supervision Service of Russia

AID - Agency for International Development

NASA - National Aeronautics and Space Administration

EPRI - Energy Power Research Institute

TPBAR - Transport Package for Shipment of Tritium Producing Burnable Absorber Rods

SRS - Savannah River Site

INEEL - Idaho National Engineering and Environmental Laboratory

## ACRONYM LIST

| | |
|---|---|
| ISCMEM | Interagency Steering Committee on Multimedia Environmental Models |
| EPA | Environmental Protection Agency |
| NCRP | National Council on Radiation Protection and Measurements |