

NUCLEAR MATERIALS AND WASTE SAFETY

The U.S. Nuclear Regulatory Commission (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 area include the regulatory oversight of nuclear fuel cycle facilities, nuclear materials activities, the storage and disposal of high-level waste (HLW), the decommissioning of nuclear reactors and other facilities and low-level waste (LLW) management, and the transportation of radioactive materials and the interim storage of spent nuclear fuel both at and away from reactor sites. This program also includes environmental reviews of these activities conducted as part of the agency's oversight efforts.

BUDGET OVERVIEW

Summary	FY 2007		FY 2008 Enacted		FY 2009			
					Request		Change from FY 2008	
	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE
Budget Authority by Program								
Program Contract Support and Travel	\$52.4	710	\$31.8	649	\$52.5	707	\$20.6	58
Program Salaries and Benefits	96.0		91.0		104.5		13.5	
Subtotal Program	\$148.4	710	\$122.9	649	\$157.0	707	\$34.1	58
Infrastructure and Support Contract Support and Travel	32.6	132	36.9	121	43.8	139	6.9	18
Infrastructure Support Salaries and Benefits	18.2		17.0		20.5		3.5	
Subtotal Program	\$50.8		\$53.9		\$64.3		\$10.4	
Total¹	\$199.2	842	\$176.8	770	\$221.3	845	\$44.6	75

¹ Numbers may not add due to rounding.

The agency requests \$221.3 million, including 845 FTE, for the Nuclear Materials and Waste Safety program in FY 2009. This represents an increase of \$44.6 million, including 75 FTE, from FY 2008.

This fiscal year (FY) 2009 budget request for the Materials and Waste Safety program supports activities that address the expected growing use of nuclear materials. There has been an increase of approximately 200 to 400 percent in the price of uranium since 2006, which is causing increased investment in uranium recovery facilities. Fourteen companies have indicated to the NRC that they will file applications and amendments to expand, restart, or build new uranium recovery facilities. In addition, the agency will review two new uranium enrichment facilities and expanded operations at existing fuel facilities.

The budget request also reflects continued efforts to implement additional requirements from the Energy Policy Act of 2005, including new licensing authority over naturally occurring and accelerator-produced radioactive material. The agency is also actively involved in the verification of the legitimacy of radioactive materials uses, including an improved nuclear materials licensing process. The agency also plans to undertake important new security activities, including additional security requirements for the control and accountability for radioactive sources.

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The agency expects to be very active in handling nuclear waste issues in FY 2009. The agency expects to receive an application from the Department of Energy (DOE) for a high-level waste repository by June 2008. The review of this application will be a major undertaking for the agency. If the application is docketed, a license application review will be conducted, and formal hearings will be held on the safety and environmental impact of the proposed repository. The agency will strive to meet the substantial challenge in completing the safety review and construction authorization decision within the three to four year time period set forth in the Nuclear Waste Policy Act. With the receipt of the license application, pre-license activities will terminate.

The Nuclear Materials and Waste program is carried out under a series of sub-programs that implement the agency's regulatory process for fuel facilities, nuclear materials users, facility decommissioning and low-level waste, spent fuel storage and radioactive material transportation, and the disposal of nuclear waste. These subprograms are listed in the table below.

BUDGET AUTHORITY AND FULL-TIME EQUIVALENTS BY PROGRAM

Programs	FY 2007		FY 2008 Enacted		FY 2009			
					Request		Change from FY 2008	
	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE
Fuel Facilities	\$34.6	159	\$35.0	159	\$48.5	198	\$13.5	39
Nuclear Materials Users	64.4	312	57.4	270	74.3	307	16.9	37
Decommissioning and Low-Level Waste	28.4	129	28.2	127	35.3	139	7.2	12
Spent Fuel Storage and Transportation	26.0	110	27.2	109	25.9	104	-1.3	-5
Subtotal	\$153.4	710	\$147.7	665	\$184.0	748	\$36.3	83
High-Level Waste Repository	45.8	132	29.0	105	37.3	98	8.3	-7
Total¹	\$199.2	842	\$176.8	770	\$221.3	845	\$44.6	75

¹ Numbers may not add due to rounding.

The increase in Nuclear Materials and Waste program supports review of new uranium recovery applications, restarts, and expansions of existing facilities, and the review of two new uranium enrichment applications. The uranium recovery activities produce the material that is made into nuclear fuel. The uranium enrichment facilities further process the uranium into material that is used in nuclear reactors.

An increase is also requested to support other ongoing nuclear material user and nuclear waste activities. The increase supports the review of two new nuclear fuel enrichment facility applications. The resources will also support the review of a license application for inspection activities at a mixed-oxide fuel fabrication facility that was initiated in FY 2008. In addition, the increase supports enhanced regulatory oversight for material licensing activities. A Government Accountability Office (GAO) investigation recommended that the NRC's review of materials license applications include additional activities to ensure adequate review of the license applications. The development and implementation of a national registry of radioactive sources to improve the controls on radioactive

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materials through the National Source Tracking System (NSTS) will be supported by these resources. Resources also support the review of commercial and DOE's transport and storage casework.

The Nuclear Material and Waste Safety program increases are summarized below:

Fuel Facilities: The agency requests an increase of \$13.5 million primarily to support the review of two new uranium enrichment facility license applications and continuation of licensing and inspection activities for existing fuel facilities.

Nuclear Materials Users: The agency requests an increase of \$16.9 million primarily to support increasing regulatory oversight activities in response to a GAO materials licensing investigation. The request also includes resources for Web-based licensing and the National Source Tracking System (NSTS), and training for Agreement State personnel.

Decommissioning and Low-Level Waste: The agency requests an increase of \$7.2 million to support uranium recovery licensing activities and initiation of related environmental reviews.

Spent Fuel Storage and Transportation: The agency's request decreases \$1.3 million due primarily to reduced resource allocations for transportation package and storage system design application reviews and the reduced research efforts for the development of the technical basis for fission product burnup credit for the storage and transportation of spent nuclear fuel.

High-Level Waste Repository: The agency requests an increase of \$8.3 million to support the NRC's statutory responsibilities regarding the potential DOE application for a HLW repository. Resources are requested to support the agency's review of an expected application from the DOE to store nuclear waste in a repository at Yucca Mountain.

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FUEL FACILITIES

Program	FY 2007		FY 2008 Enacted		FY 2009			
					Request		Change from FY 2008	
	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE
Budget Authority by Program								
Program Support	\$22.7	130	\$22.3	129	\$31.2	158	\$8.9	29
Infrastructure and Support	11.9	29	12.7	30	17.3	40	4.6	10
Total¹	\$34.6	159	35.0	159	\$48.5	198	\$13.5	39

¹ Numbers may not add due to rounding.

Change from FY 2008: The agency requests \$48.5 million, including 198 FTE, for its fuel facility activities in FY 2009. The increase of \$13.5 million, including 39 FTE, primarily supports the review of two new uranium enrichment facility license applications, and licensing and inspection activities for existing fuel facilities.

Fuel Facilities Activities: These activities support achievement of the NRC's strategic goal on Safety.

The requested resources will support the agency's regulatory activities at fuel cycle facilities and related research. The agency regulates 20 fuel cycle facilities: seven major and nine minor fuel fabrication facilities, two gaseous diffusion enrichment facilities, and two gas centrifuge enrichment facilities.

Licensing Activities: The agency expects to receive two new uranium enrichment facility license applications (AREVA and GE Hitachi) in FY 2008. The review of the GE Hitachi application will be initiated in FY 2008, and the review of the AREVA application will begin in FY 2009. The agency measures the output of its fuel facilities licensing activities (see below).

Output Measure: Number of fuel cycle licensing actions (amendments, renewals, new applications, and reviews) from the date of acceptance completed per year.						
	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Target:			Complete 53 licensing actions.	Complete 52 licensing actions.	Complete 53 licensing actions.	Complete 53 licensing actions.
Actual:			64 completed	92 completed		
Output measure excludes licensing actions involved in a hearing.						

The agency also measures the timeliness of its fuel facility licensing actions. The target for timeliness is to complete 85 percent of its licensing actions in less than or equal to 150 days and to complete all actions in less than or equal to 1.5 years.

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Output Measure: Timeliness of fuel cycle licensing actions (amendments, renewals, new applications, and reviews) from the date of acceptance, excluding request for additional information.						
	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Target:	75% ≤ 180 days 100% ≤ 2 yrs.	75% ≤ 180 days 100% ≤ 2 yrs.	80% ≤ 180 days 100% ≤ 2 yrs.	85% ≤ 180 days 100% ≤ 2 yrs.	85% ≤ 150 days 100% ≤ 1.5 yrs.	85% ≤ 150 days 100% ≤ 1.5 yrs.
Actual:	91% ≤ 180 days 100% ≤ 2 yrs.	98% ≤ 180 days 100% ≤ 2 yrs.	95% ≤ 180 days 100% ≤ 2 yrs.	81% ≤ 180 days 89% ≤ 2 yrs.		

Inspection Activities

The agency also inspects fuel facilities and measures the output and the timeliness of its inspection activities (see below). The FY 2009 output target is to complete 286 inspection modules.

Output Measure: Safety and safeguards inspection modules. Complete all core and reactive inspection modules as scheduled in Fuel Cycle Master Inspection Plan.						
	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Target:	New measure in FY 2006		Complete 165 inspection modules.	Complete 218 inspection modules.	Complete 266 inspection modules.	Complete 286 inspection modules.
Actual:			Completed 202 inspection modules.	Completed 306 inspection modules.		

The target for the timeliness of its inspection activities is to complete greater than 97 percent of inspections activities on time (see below). The number of completed inspections has increased significantly since FY 2006.

Output Measure: Timeliness of Safety and Safeguards inspection modules. Complete core inspection modules as scheduled in Fuel Cycle Master Inspection Plan.						
	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Target:	> 90% completed on time.	> 90% completed on time.	> 90% completed on time.	> 93% completed on time.	> 97% completed on time.	> 97% completed on time.
Actual:	98% completed on time. (Completed 78 inspections/98 modules).	100% completed on time. (Completed 93 inspections/178 modules).	99% completed on time. (Completed 100 inspections/202 modules).	100% completed on time.		
In FY 2005, NRC began tracking modules completed rather than inspections conducted because it is a better performance measure and modules focus on specific areas (e.g., chemical, nuclear criticality safety, material control and accounting, physical security, etc.) rather than reporting on site visits. In the above table, both the number of inspections and the number of modules are shown for FY 2004-FY 2006. Beginning in FY 2007, only modules will be recorded in the table.						

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The requested resources will also support the license application review and inspection activities of a mixed-oxide (MOX) fuel fabrication facility. The NRC will extend the license review period for the MOX review from 6 to 12 months beyond the current 3-year schedule. Resources will also support the agency's role in adjudicatory hearings on enrichment facilities.

Enforcement

Enforcement is used to deter noncompliance with NRC requirements and to encourage prompt identification and correction of violations. Violations are identified through inspections and investigations. All violations are subject to civil enforcement action and may also be subject to criminal prosecution. The agency measures its fuel facility enforcement activities by measuring its timeliness in completing reviews of technical allegations. Technical allegations are declarations, statements, or assertions of impropriety or inadequacy associated with regulated activities, the validity of which has not been established. This term includes all concerns identified by sources such as the media, individuals, or organizations. The target for FY 2009 is that 90 percent of technical allegations are closed within 150 days, 95 percent within 180 days, and all are closed within 360 days (see below). The target for timeliness has been made significantly more challenging since FY 2007.

Output Measure: Timeliness in completing reviews for technical allegations.						
	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Target:	New measure in FY 2006		70% ≤ 150 days 90% ≤ 180 days 100% ≤ 360 days	70% ≤ 150 days 90% ≤ 180 days 100% ≤ 360 days	80% ≤ 150 days 90% ≤ 180 days 100% ≤ 360 days	90% ≤ 150 days 95% ≤ 180 days 100% ≤ 360 days
Actual:			93% ≤ 150 days. 100% ≤ 180 days. 100% ≤ 360 days	100% ≤ 150 days. 100% ≤ 180 days. 100% ≤ 360 days		

Fuel Facilities Activities: These activities support achievement of the NRC's strategic goal on Security.¹

The requested resources will support homeland-security related efforts to conduct physical protection and material control and accounting (MC&A) reviews of NRC-licensed fuel facilities, implement security enhancements, and support the baseline inspection program for physical protection, MC&A, and force-on-force inspections at Category I fuel facilities. The resources will also be used to resolve policy and technical issues and develop 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.

¹ In the following discussions, references to security are intended to reflect homeland security activities.

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Program Assessment Rating Tool (PART): This program was reviewed as part of the Fuel Facilities Licensing and Inspection PART analysis completed in 2003. The program was rated as effective. The program earned high scores for program purpose and design and program management. Findings from the PART analysis included that the program purpose was clear, the program was well-designed and results oriented, and the program had met all of its strategic goal measures since reporting under the Government Performance and Results Act began in 1997. The next PART review of this program is currently scheduled to take place in FY 2010.

The following table summarizes the NRC's fall 2007 update on the status of the identified PART follow-up actions:

Follow-up Action	Status	Expected Completion Date	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	3Q FY 2005	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	2Q FY 2004	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.	Completed	4Q FY 2007	The NRC has completed and tested an agency wide executive level operating plan that has a common format and is located on a shared drive for efficiency. The new agency-wide plan is being implemented in FY 2008. Office operating plans include the agency-wide information and additional detailed information which allows easy integration of the common information. Both operating plans are aligned with the strategic plan goals and metrics and reflect the approved budgeted resources and planned activities to achieve those goals.

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 NRC will conduct regular, broad, independent evaluations of the effectiveness of the Fuel Facilities program. The NRC has demonstrated compliance with this recommendation through its plans for continued use of information from the Office of the Inspector General (OIG) audits, reviews by the Advisory Committee for Reactor Safety, and reviews by the Advisory Committee for Nuclear Waste to

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evaluate the effectiveness of agency programs. In FY 2005, licensees regulated under the Fuel Facilities program began to provide integrated safety analysis (ISA) summaries for NRC review. The ISAs are risk-informed evaluations of the facilities. The NRC will use the results of these analyses to evaluate the effectiveness of its regulation and facility oversight efforts.

FY 2007 Significant Accomplishments

The NRC conducted several significant fuel cycle licensing reviews in FY 2007. The agency completed license renewals for BWX Technologies, Inc., and Westinghouse Electric Co., LLC. To ensure that the fuel facilities are operating safely and securely, the agency reviewed, among other issues, safety analyses for controlling hazardous materials and the engineered and human performance barriers relied on to control hazardous materials. The NRC also conducted comprehensive reviews of first-of-a-kind ISA summaries submitted by licensees in response to new requirements in the domestic licensing of special nuclear material. An ISA increases the use of risk information to identify hazards, the engineered and human performance barriers relied on to control hazards, and the management measures to ensure that controls are available and reliable. The NRC completed ISA summary reviews for Westinghouse Electric Co., LLC; Nuclear Fuel Services; and AREVA NP, Inc. The NRC also completed a review of the 2006 annual ISA updates (received in January 2007) for five fuel facilities.

The NRC issued a license to USEC Inc., to construct and operate the American Centrifuge Plant (ACP). This is the second license issued by the NRC for a full-scale uranium enrichment plant. The ACP will use gas centrifuge technology to enrich uranium. The enriched uranium generated by this facility will provide fuel for nuclear power plants. Both the ACP and the Louisiana Energy Services National Enrichment Facility, another gas centrifuge facility, are currently under construction.

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NUCLEAR MATERIALS USERS

Program	FY 2007		FY 2008 Enacted		FY 2009			
					Request		Change from FY 2008	
	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE
Budget Authority by Program								
Program Support	\$50.0	276	\$45.1	240	\$58.5	270	\$13.4	30
Infrastructure and Support	14.4	36	12.3	29	15.8	36	3.5	7
Total¹	\$64.4	312	\$57.4	270	\$74.3	307	\$16.9	37

¹ Numbers may not add due to rounding.

Change from FY 2008: The agency requests \$74.3 million, including 307 FTE, for activities to regulate Nuclear Material Users. This represents an increase of \$16.9 million and 37 FTE over the FY 2008 current estimate. The increase will primarily support an improved nuclear materials users licensing review process in response to the findings of a GAO investigation, resources for a web-based licensing system and the National Source Tracking System (NSTS), training for Agreement State personnel, and new licensing requirements mandated by the Energy Policy Act of 2005 to regulate naturally occurring and accelerator-produced radioactive material.

Nuclear Materials Users Activities: These activities support achievement of the NRC's strategic goal on Safety.

The Nuclear Material Users sub-program regulates medical, industrial, and academic users of nuclear materials. The agency oversees 4,400 licenses for these users of nuclear materials and conducts approximately 1,500 health inspections of these licensees annually. In addition, the agency's 34 Agreement States oversee over 17,800 licenses. These Agreement States have assumed regulatory responsibilities for overseeing medical, industrial, and academic users of nuclear materials within their borders.

Licensing

The agency expects to complete approximately 3,100 materials licensing actions and 1,500 routine health and safety inspections in FY 2009. The NRC will also complete approximately 20-25 materials and waste rulemakings. The requested resources will support licensing and additional inspections to carry out the NRC's new regulatory responsibilities for naturally occurring and accelerator-produced radioactive material.

The agency's requests will support the development of an improved, web-based licensing system. The new system will replace current systems and eliminate the need for redundant data entry and manual procedures for reporting. The new web-based system is expected to become operational in FY 2009.

Resources support an increased regulatory effort in response to recommendations from the GAO, the U.S. Senate Permanent Subcommittee on Investigations, and the OIG. The findings of these

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investigations were addressed in the staff-developed GAO Action Plan approved by the Commission. Resources are for inclusion of additional sources into the NSTS, completion of the web-based licensing system, and continued implementation of changes to the materials licensing process to ensure adequate review of license applications and to ensure that radioactive materials are not used in a malevolent manner.

The agency measures the output of its nuclear material users license review process in several ways. The first is to measure the percentage of materials and waste rulemaking activities completed on schedule. Rulemaking activities for all activities in the Nuclear Materials and Waste Safety program are accounted for in the Nuclear Materials Users subprogram. The target is to complete 90 percent of the rulemaking activities on schedule.

Output Measure: Percentage of Materials and Waste rulemaking activities completed on schedule.					
	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Target:	New measure in FY 2009				90%
Actual:					

Another important measure of the agency's nuclear material users licensing process is to ensure that the license review process is conducted in a timely fashion. The FY 2009 target to review applications for new materials licenses and license amendments is to complete 85 percent of licensing actions within 90 days and all within 2 years. The FY 2009 target to review applications for materials license renewals and sealed source and device designs is to complete 80 percent of licensing actions within 180 days and all within 2 years (see below).

Output Measure: Timeliness of licensing actions-review of application for new materials licenses and license amendments.						
	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Target:	85% ≤ 90 days 100% ≤ 1 yr.	85% ≤ 90 days 100% ≤ 1 yr.	90% ≤ 90 days 100% ≤ 1 yr.	92% ≤ 90 days 100% ≤ 1 yr.	80% ≤ 90 days 100% ≤ 2 yrs.	85% ≤ 90 days 100% ≤ 2 yrs.
Actual:	97% ≤ 90 days (2,644 of 2,711) 99.9% ≤ 1 yr. (2,709 of 2,711)	97% ≤ 90 days (2,568 of 2,641) 99.9% ≤ 1 yr. (2,638 of 2,641)	98% ≤ 90 days (2,661 of 2,703) 100% ≤ 1 yr. (2,703 of 2,703)	98% ≤ 90 days (2,520 of 2,577) 99.8% ≤ 1 yr. (2,575 of 2,577)		

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Output Measure: Timeliness of licensing actions - review of applications for materials license renewals and sealed source and device designs.						
	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Target:	85% ≤ 180 days 100% ≤ 2 yrs.	85% ≤ 180 days 100% ≤ 2 yrs.	90% ≤ 180 days 100% ≤ 2 yrs.	92% ≤ 180 days 100% ≤ 2 yrs.	80% ≤ 180 days 100% ≤ 2 yrs.	80% ≤ 180 days 100% ≤ 2 yrs.
Actual:	98% ≤ 180 days (663 of 678) 99.9% ≤ 2 yrs. (677 of 678)	96% ≤ 180 days (608 of 633) 100% ≤ 2 yrs. (633 of 633)	94% ≤ 180 days (309 of 329) 100% ≤ 2 yrs. (329 of 329)	98% ≤ 180 days (109 of 111) 100% ≤ 2 yrs. (111 of 111)		
NOTE: FY 2009 target revised due to cuts in Headquarters for sealed source and device reviews.						

Inspection

The agency expects to complete 1,500 routine health and safety inspections in FY 2009. The agency measures the output of its inspection activities for nuclear materials users by the timeliness of its safety inspections of materials licensees. The target for safety inspections of materials licensees is to complete greater than 98 percent on time in FY 2009. The target for this measure has increased significantly since FY 2007.

Output Measure: Timeliness of safety inspections of materials licensees.						
	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Target:	> 90% completed on time.	> 90% completed on time.	> 90% completed on time.	> 90% completed on time.	> 95% completed on time.	> 98% completed on time.
Actual:	99% completed on time (completed 1,275).	99% completed on time (completed approximately 1,300).	99% completed on time (completed approximately 1,152).	99% completed on time (completed approximately 1,225).		

Enforcement

Enforcement is used to deter noncompliance with NRC requirements and to encourage prompt identification and correction of violations. Violations are identified through inspections and investigations. All significant violations are considered for civil enforcement action and the most serious violations may also be considered for criminal prosecution. The agency measures the output of its enforcement activities using two measures. The first is timeliness in completing reviews of technical allegations. Technical allegations are declarations, statements, or assertions of impropriety or inadequacy associated with regulated activities, the validity of which has not been established. This term includes all concerns identified by sources such as the media, individuals, or organizations. The target for FY 2009 is that 90 percent of technical allegations are closed within 150 days, 95 percent within 180 days, and all are closed within 360 days (see next page). The target for timeliness of technical allegation reviews has been made significantly more challenging since

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FY 2007. The second measure is timeliness in completing enforcement actions. The target for FY 2009 is all investigation cases are closed within 360 days of processing and all non-investigation cases are closed within 180 days.

Output Measure: Timeliness in completing reviews for technical allegations.						
	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Target:	70% ≤ 150 days 90% ≤ 180 days 100% ≤ 360 days	70% ≤ 150 days 90% ≤ 180 days 100% ≤ 360 days	70% ≤ 150 days 90% ≤ 180 days 100% ≤ 360 days	70% ≤ 150 days 90% ≤ 180 days 100% ≤ 360 days	80% ≤ 150 days 90% ≤ 180 days 100% ≤ 360 days	90% ≤ 150 days 95% ≤ 180 days 100% ≤ 360 days
Actual:	90% ≤ 150 days 97% ≤ 180 days. 99% ≤ 360 days	96% ≤ 150 days 99% ≤ 180 days. 100% ≤ 360 days	96% ≤ 150 days 100% ≤ 180 days. 100% ≤ 360 days	90% ≤ 150 days 99% ≤ 180 days. 100% ≤ 360 days		

Output Measure: Timeliness in completing enforcement actions.						
	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Target:	New measure in FY 2006		Investigation cases: 100% completed within 360 days of OE processing time. Non-Investigation cases: 100% completed within 180 days of OE processing time.	Investigation cases: 100% completed within 360 days of OE processing time. Non-Investigation cases: 100% completed within 180 days of OE processing time.	Investigation cases: 100% completed within 360 days of OE processing time. Non-Investigation cases: 100% completed within 180 days of OE processing time.	Investigation cases: 100% completed within 360 days of OE processing time. Non-Investigation cases: 100% completed within 180 days of OE processing time.
Actual:			Investigation: None ≥ 360 days Non-Investigations: None ≥ 180 days	Investigation: None ≥ 360 days Non-Investigations: None ≥ 180 days		

Investigations

Investigations are initiated after information concerning potential wrongdoing has been received by the NRC either through an allegation from sources external to the NRC or as a result of inspections performed by agency personnel. A special agent is assigned to recognize, locate, develop and present evidence that will reconstruct events. The agency measures the output of its investigation activities using two timeliness measures. For the first measure, the target for FY 2009 is 85 percent of investigations which developed sufficient information to reach a conclusion regarding wrongdoing will be completed in 10 months or less. The target for the second measure is to close all investigations within the time provided under the Statute of Limitations to be able to initiate civil and/or criminal enforcement action.

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Output Measure: Timeliness in completing investigations - Target 1.						
	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Target:	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.	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.	85% of investigations which developed sufficient information to reach a conclusion regarding wrongdoing will be completed in 10 months or less.
Actual:	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) developed sufficient information to reach a conclusion regarding wrongdoing in 10 months or less.	Completed 49 investigations in which 83.7% (41) developed sufficient information to reach a conclusion regarding wrongdoing in 10 months or less.	Completed 26 investigations in which 96.2% (25) developed sufficient information to reach a conclusion regarding wrongdoing were completed in 10 months or less.		

Output Measure: Timeliness in completing investigations - Target 2.						
	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
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.	Close 100% of OI investigations in time to initiate civil and/or criminal enforcement action.
Actual:				Closed 100% (99) of OI investigations in time to initiate civil and/or criminal enforcement action.		

Import/Export Authorizations

Certain nuclear materials must be approved for import or export. Before approving an export license, the NRC determines that the proposed export is not inimical to the common defense and security of the United States. In making this determination, the Commission, in consultation with the Executive Branch, considers whether the importing country has the technical and administrative capability and the resources and regulatory structure to manage the material in a safe and secure

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manner, and has authorized the recipient to receive and possess the material. Import licenses are granted only after NRC determines the import would not be inimical to the common defense and security of the United States or pose a threat to public health and safety.

Output Measure: Issuance of NRC import/export authorizations.						
	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Target:	Complete reviews for and issue as appropriate, approximately 85-125 NRC import/export authorizations (NRC licenses or amendments). 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, 150-200 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, 150-200 NRC import/export authorizations (NRC licenses or amendments). Staff reviews will be completed for 100% of the cases within 60 days.
Actual:	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.	Completed 153 staff reviews. 97% were completed within 60 days.		

Agreement States

The NRC will conduct materials activities related to Agreement States, including oversight, technical assistance, regulatory development, and cooperative efforts. An increase in resources will allow the agency to offer greater assistance for Agreement State staff training and will provide funding to support the cost of training and the associated travel costs.

In addition, resources will be used to conduct NRC's Agreement States liaison activities regarding enhanced control and security actions for materials licensees, as well as cooperative efforts and liaison with all State and local governments, Tribal organizations, and interstate organizations in matters relating to homeland security for nuclear waste and materials.

Nuclear Materials Users Activities: These activities support achievement of the NRC's strategic goal on Security.

The requested resources support the development and implementation of the national registry, the National Source Tracking System (NSTS), of radioactive sources of concern to improve controls on risk-significant radioactive materials to prevent their malevolent use. The agency will conduct inspections to ensure that increased controls are being followed at materials facilities, as well as conduct pre-licensing inspections of new materials applicants. The resource request will also support implementation of recommendations from the interagency Task Force on Radiation Source

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Protection and Control. All of these activities will strengthen controls for the possession, handling, import, and export of nuclear materials.

Program Assessment Rating Tool (PART): This program was reviewed as part of the Nuclear Materials Users Licensing and Inspection PART analysis completed 2004. This program was rated as effective. The next PART review of this program is currently scheduled to take place in FY 2011.

In response to the OMB's findings, the following table summarizes the NRC's fall 2007 update to OMB regarding the status of the identified follow-up actions:

Follow-up Action	Status	Expected Completion Date	Comments
(1) Provide with the FY 2007 budget a clearer demonstration of the contributions of specific program activities to agency goals.	Completed	2Q FY 2006	
(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 are currently being addressed by an agency-wide working group.	Completed	4Q FY 2007	The NRC has completed and tested an agency wide executive level operating plan that has a common format and is located on a shared drive for efficiency. The new agency-wide plan is being implemented in FY 2008. Office operating plans include the agency-wide information and additional detailed information which allows easy integration of the common information. Both operating plans are aligned with the strategic plan goals and metrics and reflect the approved budgeted resources and planned activities to achieve those goals.
(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 OIG is currently conducting a review in the Nuclear Materials Users program area.	Action taken, but not completed	FY 2010	The NRC will actively engage the OIG on planned PART reviews so that the OMB 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. NRC is in the process of contracting with an outside organization (such as a university, consulting firm, Federally Funded Research and Development Center, or private non-profit or not-for-profit group) on a pilot basis. Following completion of the first two

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Follow-up Action	Status	Expected Completion Date	Comments
			evaluations, the NRC will assess the quality of the external evaluations, the effectiveness in identifying implementation actions that have the potential to improve organizational performance, and will make a determination on whether these external evaluations should continue on a routine basis.

FY 2007 Significant Accomplishments

In FY 2007, the NRC conducted approximately 3,000 materials licensing actions and 1,225 material users inspections.

The NRC is assisting U.S. Customs and Border Protection in fulfilling its Congressional mandate to verify the legitimacy of radioactive material shipments coming into the United States through established ports of entry. The NRC regularly provides customs and border protection staff with information on the licensing of radioactive materials, including import and export licensing data, and has established processes to provide around-the-clock technical support.

The NRC completed the interim inventory of high-risk sources, defined as IAEA Category 1 and Category 2 sources. This inventory was useful in supporting Government efforts to respond to national emergencies and nationally significant events. The NRC also used the inventory to enhance the safety, security, and control of radioactive sources, including issuance of increased control orders. In FY 2007, to support future enhancements of safety and security, the inventory was expanded to include data on generally and specifically licensed sources above Category 3.5 quantities.

The NRC worked with the Agreement States to impose additional safety and security measures on licensees that possess quantities greater than those specified in IAEA Category 2. In addition to evaluating the need to further enhance security at byproduct material licensees, the NRC inspected licensee compliance with these safety and security measures and coordinated with Agreement States to identify and resolve any implementation issues. The NRC also issued security orders to irradiator facilities, manufacturer and distributor facilities, and licensees shipping IAEA Category 1 quantities, requiring this group of licensees to implement a program to fingerprint and conduct a criminal history check for persons seeking access to safeguards information and licensed material. The NRC revised its process for reviewing new license applications to provide increased assurance that licensed material will be used as intended, primarily through conduct of prelicensing inspections.

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Rulemaking Activities: In FY 2007, the NRC published several rules that certify the safety of casks for storage of spent nuclear fuel, implementing a NSTS for certain sealed sources, and issuance of the final rule on Naturally-occurring and Accelerator-produced Radioactive Materials (NARM).

Investigation and Enforcement: In FY 2007 NRC issued approximately 50 escalated actions, 10 of which included the issuance of civil penalties. Significant violations identified included failure to (1) maintain control over licensed material, (2) comply with requirements of the increased controls order, (3) use two independent methods to secure a portable gauging device to deter/prevent theft, (4) secure licensed material from unauthorized access, and (5) submit accurate information to the NRC.

Intergovernmental Activities: The NRC, with the assistance of the Agreement States, completed nine integrated materials performance evaluation program reviews to determine the adequacy and compatibility of those Agreement State programs with NRC requirements and one review for the materials licensing and inspection program in Region III. Three States (Nebraska, Massachusetts, and Ohio) signed an addendum that modified their respective Section 274i agreements under the Atomic Energy Act to perform security inspections, for and on behalf of the NRC, of materials licensees authorized to possess and transport items containing radioactive material in quantities of concern.

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DECOMMISSIONING AND LOW-LEVEL WASTE

Program	FY 2007		FY 2008 Enacted		FY 2009			
					Request		Change from FY 2008	
	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE
Budget Authority by Program								
Program Support	\$19.4	106	\$18.8	105	\$23.7	113	\$4.9	8
Infrastructure and Support	9.0	23	9.3	22	11.6	27	2.2	4
Total¹	\$28.4	129	\$28.2	127	\$35.3	139	\$7.2	12

¹ Numbers may not add due to rounding.

Change from FY 2008: The agency requests \$35.3 million, including 139 FTE, for decommissioning and low-level waste activities in FY 2009. This represents an increase of \$7.2 million, including 12 FTE, from FY 2008. The increased resources will support uranium recovery licensing activities and the initiation of related environmental reviews.

Decommissioning and Low-Level Waste Activities: These activities support achievement of the NRC's strategic goal on Safety.

When a power company decides to close its nuclear power plant permanently, the facility undergoes decommissioning to remove it safely from service and reduce residual radioactivity to a level that permits release of the property and termination of the operating license. There are currently 15 nuclear power plant units or early demonstration reactors that have been permanently shut down and are in some phase of the decommissioning process. Low-level waste disposal occurs at commercially operated low-level waste disposal facilities that can be licensed by either the NRC or Agreement States. The three facilities currently operating as State licensees are Barnwell (State of South Carolina), Energy Solutions (State of Utah), and Hanford (State of Washington).

Uranium Recovery Facilities

The requested resources will support the initiation of safety reviews and some environmental reviews for 21 expected new applications, restarts, and expansions of existing facilities. The increase in uranium ore prices has spurred a renewed interest in mining activities to produce the uranium ore that is processed into nuclear fuel. Resources would also support associated hearings, if requested.

Low-level Waste Activities

The program supports Low-level Waste (LLW) licensing activities such as onsite disposal, the review of international experience, guidance development, and import/export reviews. This program also supports low-level waste interactions with and technical assistance to DOE, the Advisory Committee on Nuclear Waste and Materials, and the Agreement States on important LLW regulatory issues. The agency will evaluate two DOE waste determinations covering tanks at the Savannah River Site and will conduct monitoring activities of DOE's disposal activities at the Savannah River Site and the Idaho National Laboratory.

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Decommissioning

The requested resources will also support the management of approximately 65 complex materials, power reactor, research and test reactor, and inactive uranium recovery facilities undergoing decommissioning, including license termination of two sites.

The agency measures the output of its environmental activities in several ways. The first is to measure support program licensing activities by preparing and/or reviewing required environmental reports. The target in FY 2009 is to complete one final environmental impact statement and draft environmental impact statement, and three complex environmental assessments (see below).

Output Measure: Support program licensing activities by preparing and/or reviewing required environmental reports.						
	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Target:	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 or draft EIS.* Complete 3 complex EAs.	Complete 2 final EISs or draft EISs.* Complete 3 complex EAs.	Complete 1 final EIS or draft EIS.* Complete 3 complex EAs.
Actual:	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.	Completed the draft Sequoyah Fuels Corp EIS and provided comments as a cooperating agency on the preliminary final draft West Valley EIS. Completed 3 EAs (NARM Rulemaking, Westinghouse License Renewal EA and the Rancho Seco EA.)		
*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.						

The second measure is to eliminate the need for an environmental assessment for certain decommissioning licensing actions by incorporating them by rule as actions that only require a categorical exclusion.

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Output Measure: Eliminate the need for an environmental assessment for certain decommissioning licensing actions by incorporating them by rule as actions that only require a categorical exclusion. Supported by Decommissioning Licensing/Environmental Reviews.*					
	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Target:	New measure in FY 2009				Support preparation of final Categorical Exclusion Rulemaking.*
Actual:					
*Targets, baselines, and calculation methods are under development and measure may be revised.					

The last measure is to clean-up complex materials, fuel cycle sites, and power reactors, and complete uranium recovery licensing actions. The target is to complete decommissioning and uranium recovery licensing actions as scheduled in the Decommissioning Operating Plan.

Output Measure: Clean-up complex materials, fuel cycle sites, and power reactors; complete uranium recovery licensing actions.						
	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Target:	Remove 1 site from SDMP list after satisfactory clean-up. Conduct 90-day Acceptance Review.	Develop a risk-informed, graded approach to prioritize and manage decommissioning licensing and inspection. 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. Complete high-priority licensing actions as scheduled in the Decommissioning Operating Plan.	Complete licensing actions as scheduled in the Decommissioning Operating Plan. Conduct PART for the Decommissioning and Low-Level Waste program. Complete proposed rule to prevent future legacy sites.	Complete decommissioning and uranium recovery licensing actions as scheduled in the Decommissioning Operating Plan. Complete final rule to prevent future legacy sites.	Complete decommissioning and uranium recovery licensing actions as scheduled in the Decommissioning Operating Plan.
Actual:	2 sites removed from SDMP (B&W Parks Township and MolyCorp-York). 2 complex sites also removed (Envirotest labs and University of Wyoming). Acceptance reviews were completed within timeliness goals.	Developed a risk-informed, graded approach to prioritize and manage decommissioning licensing and inspection. Completed decommissioning at 8 sites; approved 6 decommissioning /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. Completed decommissioning at 7 sites.	Completed proposed rule to prevent future legacy sites. Conducted PART for the DLLW Program; program rated "effective" by OMB. Completed decommissioning at 11 sites.		

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Output Measure: Clean-up complex materials, fuel cycle sites, and power reactors; complete uranium recovery licensing actions.						
	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
*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.						

Waste-Incidental to Reprocessing (WIR)

Resources are also provided for waste-incidental to reprocessing activities. The requested resources provide oversight of certain DOE waste determination activities and plans consistent with the NRC's responsibilities described in the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005 (NDAA). This act requires DOE to consult with the NRC on its WIR determinations for facilities in South Carolina and Idaho, and directs the NRC to monitor DOE disposal actions to assess compliance with the performance objectives. The agency measures the output of its WIR review activities. The target in FY 2009 is to complete the WIR review and monitoring plan/activities as scheduled in the Environmental Protection and Performance Assessment Operating Plan.

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Output Measure: DOE waste incidental to reprocessing (WIR) reviews completed.						
	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Target:	New measure in FY 2006		Complete 2 WIR reviews.	Complete 2 WIR Monitoring Plans. Complete the draft Final WIR Standard Review Plan (SRP). 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. Complete resolution of 2 WIR generic technical and policy issues identified in FY 2006.	Complete WIR review or monitoring plan/activities as scheduled in the Environmental Protection and Performance Assessment Operating Plan.
Actual:			Met Target.*	Completed 2 WIR Monitoring Plans (INL and SRS) Issued the Draft Final WIR SRP (NUREG-1854) Completed resolution of 2 WIR generic technical and policy issues.		
*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.						

Program Assessment Rating Tool (PART): This program was reviewed as part of the Decommissioning and Low Level Waste PART analysis completed 2007. This program was rated as effective. The program earned high scores for program purpose and design and for program management. Findings from the PART analysis included that the program purpose was clear and that the regular independent assessments the program uses have helped it to become more results focused. The program achieves its long term safety and security goals with respect to the safe management and cleanup of an increasing number of NRC licensed sites that use radioactive material. The next PART review of this program is currently scheduled to take place in FY 2011.

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The following table summarizes the improvement plan actions identified by OMB:

Follow-up Action	Status	Expected Completion Date	Comments
Developing additional efficiency measures to augment those already in place, including the updating of baseline data, to provide a means to systematically measure and monitor efficiencies, as well as targets that demonstrate improved efficiency or cost effectiveness over the previous year.	Action taken, but not completed	FY 2010	NRC staff has initiated a new effort to improve the efficiency of certain licensing actions that will result in reductions in costs and time. In FY 2009 staff will work to develop a rulemaking to address certain licensing actions. Staff will also collect baseline data on time and costs for certain licensing actions to evaluate how the new rule effects the time and cost of these licensing actions.
Developing better linkage of budget requests to the program's success in accomplishing annual and agency long term goals. In reviewing the budget, the program tracks many measures, but there needs to be a clear connection of how funding impacts goal achievement.	Action taken, but not completed.	June 30, 2008	This action will be addressed through implementation of the new Executive Order on Improving Government Performance. The NRC CFO has been designated as the agency's Performance Improvement Officer.

FY 2007 Significant Accomplishments

In FY 2007, the NRC terminated the licenses or completed decommissioning activities, and the associated performance assessment and environmental reviews at two power reactors, three research and test reactors, and six complex materials sites. The staff also completed a low-level waste strategic assessment that prioritized activities to ensure guidance was risk-informed and updated to support future activities.

The NRC continued its responsibilities for reviewing DOE WIR determinations for the Savannah River Site and the Idaho National Laboratory. In FY 2007, the NRC developed guidance for reviewing DOE waste incidental to reprocessing activities. In addition, specific monitoring plans were prepared for the Savannah River Site and the Idaho National Laboratory.

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SPENT FUEL STORAGE AND TRANSPORTATION

Program	FY 2007		FY 2008 Enacted		FY 2009			
					Request		Change from FY 2008	
	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE
Budget Authority by Program								
Program Support	\$17.5	90	\$17.9	87	\$16.6	83	-\$1.2	-4
Infrastructure and Support	8.5	20	9.3	22	9.3	21	-0.1	-1
Total¹	\$26.0	110	\$27.2	109	\$25.9	104	-\$1.3	-5

¹ Numbers may not add due to rounding.

Change from FY 2008: The agency requests \$25.9 million, including 104 FTE, for spent fuel storage and transportation activities in FY 2009. This represents a decrease of \$1.3 million, including 5 FTE, from FY 2008. The spent fuel storage and transportation resources decrease due primarily to reduced resource allocations for transportation package and storage system design application reviews, and the reduced research efforts for the development of the technical basis for fission product burnup credit for the storage and transportation of spent nuclear fuel.

Spent Fuel Storage and Transportation Activities: These activities support achievement of the NRC's strategic goal on Safety.

The Spent Fuel Storage and Transportation program licenses, certifies, and inspects the interim storage of spent fuel from commercial nuclear reactors and the domestic and the 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.

Licensing

The agency's review of transportation license requests protects public health and safety by ensuring that shipments of nuclear materials are made in NRC-approved packages that meet rigorous performance requirements. The agency's review of interim storage verifies that spent fuel is safely stored, thereby enabling continued reactor operations. The agency will review 60-70 transportation packages, 20-25 spent fuel storage cask designs and storage facility license reviews, and 25 package design quality assurance programs to confirm that applicant-proposed designs are consistent with regulatory requirements. The agency measures the output of its Spent Fuel Storage and Transportation license review process through two timeliness measures. The first is to complete 80 percent of transportation container design reviews in less than or equal to 12.6 months and all reviews within two years. The second is to complete 80 percent of storage container and installation design reviews within 7.4 months and all within two years (see below).

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Output Measure: Complete storage container and installation design reviews within timeliness goals.						
	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Target:	80% ≤ 14 mos. 100% ≤ 2 yrs.	80% ≤ 14 mos. 100% ≤ 2 yrs.	80% ≤ 13.3 mos. 100% ≤ 2 yrs.	80% ≤ 12.6 mos. 100% ≤ 2 yrs.	80% ≤ 12.6* mos. 100% ≤ 2 yrs.	80% ≤ 12.6 mos. 100% ≤ 2 yrs.
Actual:	88% ≤ 14 mos. 100% ≤ 2 yrs.	82% ≤ 14 mos. 89% ≤ 2 yrs.*	85% ≤ 13.3 mos. 100% ≤ 2 yrs.	100% ≤ 12.6 mos. 100% ≤ 2 yrs.		
* The target for FY 2008 has been amended to reflect the changing profile of the casework, based on the increased technical complexity and applicants "bundling" of multiple requests in a single application, and updated labor rates for the current mix of casework. The casework profile also changed as a result of revisions to 10 CFR Part 72 that reduced regulatory burden on licensees and allowed certain changes without prior NRC approval, resulting in a 20 percent reduction in forecasted amendment applications, beginning in FY 2004. The labor rates have also been updated based on historical expenditures during FY 2006 and FY 2007. The labor rates had last been updated for the FY 2007 budget, based on expenditures during FY 2004 and FY 2005.						

Output Measure: Complete transportation container design reviews within timeliness goals.						
	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Target:	80% ≤ 8 mos. 100% ≤ 2 yrs.	80% ≤ 8 mos. 100% ≤ 2 yrs.	80% ≤ 7.7 mos. 100% ≤ 2 yrs.	80% ≤ 7.4 mos. 100% ≤ 2 yrs.	80% ≤ 7.4* mos. 100% ≤ 2 yrs.	80% ≤ 7.4 mos. 100% ≤ 2 yrs.
Actual:	93% ≤ 8 mos. 100% ≤ 2 yrs.	89% ≤ 8 mos. 100% ≤ 2 yrs.	96% ≤ 7.7 mos. 100% ≤ 2 yrs.	92% ≤ 7.4 mos. 100% ≤ 2 yrs.		
*The target for FY 2008 has been amended to reflect the changing profile of the casework, based on the increased technical complexity and applicants "bundling" of multiple requests in a single application, and updated labor rates for the current mix of casework. The casework profile also changed as a result of revisions to 10 CFR 72 that reduced regulatory burden on licensees and allowed certain changes without prior NRC approval, resulting in a 20 percent reduction in forecasted amendment applications, beginning in FY 2004. The labor rates have also been updated based on historical expenditures during FY 2006 and FY 2007. The labor rates had last been updated for the FY 2007 budget, based on historical expenditures during FY 2004 and FY 2005.						

Inspections

The NRC periodically inspects the design, fabrication, and use of dry cask storage systems by sending inspectors to licensee and cask vendor facilities. The inspectors examine whether licensees and vendors are performing activities in accordance with radiation safety requirements, licensing and certificate of compliance requirements, and quality assurance program commitments. The agency measures the output of its spent fuel storage and transportation inspection activities by measuring the number of inspections completed. The target for FY 2009 is to complete 16 inspections.

Output Measure: Number of spent fuel storage and transportation inspections completed.						
	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Target:	New measure in FY 2006		16 inspections	16 inspections	16 inspections	16 inspections
Actual:			16 inspections	16 inspections		

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Spent Fuel Storage and Transportation Activities: These activities support achievement of the NRC's strategic goal on 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): This program was reviewed as part of the Spent Fuel Storage and Transportation Licensing and Inspection PART analysis completed 2005. This program was rated as effective. The program earned high scores for program purpose and design and for program management. Findings from the PART analysis included that the purpose was clear and the program used operating plan information to manage and improve program performance. The next PART review of this program is currently scheduled to take place in FY 2010.

The following table summarizes the NRC's fall 2007 update to OMB regarding the status of the identified follow-up actions:

Follow-up Action	Status	Expected Completion Date	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 OIG, 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.	Action taken, but not completed	FY 2009	The NRC will actively engage the OIG on planned PART reviews so that the OMB 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. NRC is in the process of contracting with an outside organization (such as a university, consulting firm, Federally Funded Research and Development Center, or private non-profit or not-for-profit group) on a pilot basis. Following completion of the first two evaluations, the NRC will assess the quality of the external evaluations, the effectiveness in identifying implementation actions that have the potential to improve organizational performance, and will make a determination on whether these external evaluations should continue on a routine basis.
(2) Resource needs are not presented in a complete and transparent manner. Over the	Completed	2Q FY 2006	Submission of the FY 2007 Performance Budget shows completion

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Follow-up Action	Status	Expected Completion Date	Comments
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 (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 are currently being addressed by an agency-wide working group.			of these actions in February 2006. Page 86 of the Performance Measurement chapter provides a brief explanation of the prioritization process. The NRC has completed and tested an agency wide executive level operating plan that has a common format and is located on a shared drive for efficiency. The new agency-wide plan is being implemented in FY 2008. Office operating plans include the agency-wide information and additional detailed information which allows easy integration of the common information. Both operating plans are aligned with the strategic plan goals and metrics and reflect the approved budgeted resources and planned activities to achieve those goals

Research

The agency conducts important research activities to ensure the safety of stored nuclear waste and its transportation. The research program is designed to improve the agency's knowledge where uncertainty exists, where safety margins are not well characterized, and where regulatory decisions need to be confirmed in existing or new designs and technologies. The agency measures the output of its research activities using two measures. The first measures the timeliness of its critical research programs. The agency's target in FY 2009 is to accomplish 90 percent of the major research project milestones. The second is to improve the quality of its research products. The target in FY 2009 is to achieve a score of 3.5 on a scale of 1 to 5 for research products.

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Output Measure: Timeliness of completing actions on critical research programs.						
	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
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.	90% of major milestones met on or before their due date.	90% of major milestones met on or before their due date.
Actual:	90% across programs.	81% across programs.*	96% across programs.	100% 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. *The target was not met as a result of unanticipated requirements within critical research programs and emergent work of equal priority.						

Output measure: Acceptable technical quality of agency research technical products						
	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Target:	New measure in FY 2007			Combined score ≥3.0	Combined score ≥3.0	Combined score ≥3.5
Actual:				4.0		
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 Advisory Committee on Reactor Safeguards on research programs and products. As appropriate, other mechanisms will be developed and added to this process to measure the quality of research products.						

FY 2007 Significant Accomplishments

In FY 2007, the NRC completed 57 transport container design reviews and 10 storage container and installation design reviews. The NRC also conducted 16 inspections of ISFSI and radioactive material package certificate holders in order to perform “dry run” loadings with licensee personnel and to ensure that casks are being fabricated according to approved safety requirements.

The NRC issued studies of two tunnel fires involving non-nuclear materials to analyze possible regulatory implications of such events for the transportation of spent nuclear fuel. The Baltimore tunnel fire scenario analysis (NUREG/CR-6886, Revision 1, Spent Fuel Transportation Package Response to the Baltimore Tunnel Fire Scenario issued November, 2006) investigated the freight train derailment and fire that occurred on July 18, 2001, in Baltimore, Maryland. The Caldecott Tunnel fire scenario analysis (NUREG/CR-6894, Revision 1, Spent Fuel Transportation Package Response to the Caldecott Tunnel Fire Scenario issued January 2007) investigated the tank truck and trailer accident and fire that occurred April 7, 1982, near Oakland, California. The staff concluded from both evaluations that regulatory requirements for the containment of radioactive material would have been met, and hence the public would be protected from similar events involving radioactive material shipments. Late in FY 2007, the NRC began a study of the McArthur-Maze elevated roadway/bridge material that was damaged in the May 2007 gasoline tanker truck accident, fire and resulting partial collapse of a portion of Interstate 580 in Oakland, California.

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The NRC issued a draft supplement for the environmental assessment of the spent fuel storage facility under construction at the Diablo Canyon nuclear plant. The report follows a June 2006 ruling by the U.S. Court of Appeals for the Ninth Circuit that the NRC must consider the possibility of terrorist attacks in its environmental reviews of proposed new facilities. The supplemental environmental assessment concludes that the probability of a successful terrorist attack on any such facility is very low.

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HIGH-LEVEL WASTE REPOSITORY

Program	FY 2007		FY 2008 Enacted		FY 2009			
					Request		Change from FY 2008	
	\$M	FTE	\$M	FTE	\$M	FTE	\$M	FTE
Budget Authority by Program								
Program Support ¹	\$38.8	108	\$18.7	88	\$26.9	83	\$8.1	-5
Infrastructure and Support	7.0	24	10.3	17	10.4	14	.2	-3
Total²	\$45.8	132	\$29.0	105	\$37.3	98	\$8.3	-7

¹ Prior year Nuclear Waste Fund appropriations includes a total of \$25.5 that will be available in FY 2008 and FY 2009.

² Numbers may not add due to rounding.

Change from FY 2008: The agency requests \$37.3 million, including 98 FTE, for high-level waste activities in FY 2009. This represents an increase of \$8.3 million, including a decrease of 7 FTE from FY 2008. The agency expects to receive a high-level waste license application during FY 2008.

High-Level Waste Repository Activities: These activities support achievement of the NRC's strategic goal on Safety.

The requested resources will support the NRC's statutory responsibilities regarding the potential DOE application for a High-Level Waste (HLW) repository. The FY 2009 budget request assumes the receipt of a DOE license application in June 2008. In October 2007, DOE certified its document collection for the licensing support network, signaling that a license application could be received as early as April 2008. With the receipt of a license application, pre-license application activities will terminate. The agency will then determine whether to adopt the DOE final environmental impact statement (FEIS) and docket the application. The target goal of 90 days for this determination is based upon receipt of a high quality application. If the application is docketed, a license application review will be conducted and formal hearings will be held on the safety and environmental impact of the proposed high-level waste repository.

The requested resources will also support adjudicatory activities associated with the licensing preceding. This includes responding to licensing support network disputes, adjudicating the admissibility of an estimated 1,000 contentions, prehearing conferences, discovery activities, and a possible hearing on environmental issues. It also provides for continued operation of the Licensing Support Network and the Digital Data Management system supporting the adjudicatory process.

Resources also support the review of storage cask system design and transportation package applications to be used as part of the DOE's Transportation Aging (storage) and Disposal (TAD) standardized canister-based, spent fuel management program, as well as, the analysis of international spent fuel transportation package testing conducted by Germany and Japan.

The agency measures the output of its high-level waste activities through several measures. The first is not applicable for FY 2009 but is included in this request to show changes in the agency's output measures.

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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 or ahead of schedule and within requested budget resources.*						
Target: Major milestones that are needed to evaluate and determine whether DOE's potential repository license application meets NRC's repository performance standard will be met within a specified number of days of their due dates.						
	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Target:	Meet milestones within 90 days of due date.	Meet milestones within 90 days of due date.	Meet milestones within 90 days of due date.	Meet milestones within 90 days of due date.	Measure ends. Replaced with a new HLW measure.	N/A
Actual:	Met target.	Met target.	Met target.	Met target.		
*Submittal date of License Application is controlled by DOE; targets assume June FY 2008 but actual submittal date may vary. This supports Major Program Output #20 (docketing decision and FEIS adoption decision).						

The second output measure begins in FY 2008. It measures whether the high-level waste application's major milestones are completed on time. The first target is for the agency to decide whether to docket the application and adopt the DOE FEIS within 90 days of receipt of the application. If the application is delayed by not more than two months, this action may occur in early FY2009 but no later than the end of the first quarter. The second target is to issue the first pre-hearing conference order identifying participants in the proceeding, admitted contentions, and setting discovery and other schedules 100 days after a Federal Register notice of hearing on the license application.

New HLW Output Measure: After receipt of a license application major milestones are completed on time.*						
	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Target:	New measure in FY 2009				Decide whether to docket license application and adopt DOE final environmental impact statement no more than 90 days from receipt of application	The first pre-hearing conference order identifying participants in the proceeding, admitted contentions, and setting discovery and other schedules is issued 100 days after a federal register notice of hearing on the license application.
Actual:						
* Submittal date of License Application is controlled by DOE; targets assume June FY 2008 but actual submittal date may vary.						

The third measure measures the efficiency of the application review. The target for FY 2009 is that Major Tasks in the High-Level Waste Licensing Review Program Project Plan will take five percent less combined contractor and NRC staff FTE to complete than is projected in the plan. The Licensing Review Program Plan actively manages activities affecting review of the license application and ensures that sufficient planning and controls are in place to receive and review the license application efficiently.

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Output Measure: High-Level Waste Repository Resolution License Application Review.*					
	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Target:	New measure in FY 2009				Major Tasks in the High-Level Waste Licensing Review Program Project Plan will take 5 percent less combined contractor and NRC staff FTE to complete than is projected in the plan.*
Actual:					
*Targets, baselines, and calculation methods are under development and measure may be revised.					

Enforcement

Enforcement is used to deter noncompliance with NRC requirements and to encourage prompt identification and correction of violations. Violations are identified through inspections and investigations. All significant violations are considered for civil enforcement action and the most serious violations may also be considered for criminal prosecution. The agency measures the output of its enforcement activities by measuring the timeliness in completing reviews of technical allegations. Technical allegations are declarations, statements, or assertions of impropriety or inadequacy associated with regulated activities, the validity of which has not been established. This term includes all concerns identified by sources such as the media, individuals, or organizations. The target for FY 2009 is that 90 percent of technical allegations are closed within 150 days, 95 percent within 180 days, and all are closed within 360 days.

Output Measure: Timeliness in completing reviews for technical allegations.						
	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009
Target:	New measure in FY 2005.	70% ≤ 150 days 90% ≤ 180 days 100% ≤ 360 days	70% ≤ 150 days 90% ≤ 180 days 100% ≤ 360 days	70% ≤ 150 days 90% ≤ 180 days 100% ≤ 360 days	80% ≤ 150 days 90% ≤ 180 days 100% ≤ 360 days	90% ≤ 150 days 95% ≤ 180 days 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 summer FY 2008.						

Program Assessment Rating Tool (PART): This program was reviewed as part of the High-Level Waste Repository PART analysis completed 2007. This program was rated as effective. The program earned high scores for program purpose and design and for program management. Findings from the PART analysis included that the purpose was clear and the program used regular, independent assessments to help the program become more results-focused in satisfying the NRC's Nuclear Waste Policy Act responsibilities and pre-licensing functions. In addition, the program has made significant progress towards meeting the goal of establishing a regulatory system to ensure that

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the repository achieves long-term safety and security goals. The next PART review of this program is currently scheduled to take place in FY 2012.

OMB identified the following improvement plan actions in the following table:

Follow-up Action	Status	Expected Completion Date	Comments
Developing additional efficiency measures, including the updating of baseline data, to provide a means to systematically measure and monitor efficiencies through tracking labor effort in support of major milestones and establishing targets that demonstrate improved efficiency or cost effectiveness over the previous year.	Action taken, but not completed.	Ongoing	New output measures for FY 2009 have been developed.
Developing better linkage of budget requests to the program's success in accomplishing annual and agency long term goals. In reviewing the budget, the program tracks many measures, but there needs to be a clear connection of how funding impacts goal achievement.	Action taken, but not completed.	June 30, 2008	This action will be addressed through implementation of the new Executive Order on Improving Government Performance. The NRC CFO has been designated as the agency's Performance Improvement Officer.

FY 2007 Significant Accomplishments

In FY 2007, the NRC assessed technical and regulatory issues relevant to the proposed HLW repository at Yucca Mountain. The NRC conducted public technical exchanges and interactions; reviewed and evaluated technical and scientific changes to the DOE program; observed and commented on the DOE quality assurance program; issued enhanced license application review guidance; revised technical models; and supplemented, maintained, and operated the Licensing Support Network to allow document access to potential parties to the hearing and the public. The NRC also conducted public outreach activities and meetings to make the regulatory process accessible to interested stakeholders.

The NRC continued to interact with the DOE on its spent fuel management program, which will use standardized TAD canisters. The DOE issued final performance specifications for the disposal container in June 2007, and these specifications will inform the designs for transport package and storage cask systems.

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