

## **NUCLEAR WASTE SAFETY**

## NUCLEAR WASTE SAFETY

The Nuclear Waste Safety arena encompasses NRC oversight of the long-term storage and disposal of high-level waste (HLW), regulatory oversight for the transportation of radioactive materials and the interim storage of spent nuclear fuel both at and away from reactor sites, oversight of the decommissioning of nuclear reactors and other facilities, low-level waste management, and waste safety research. The NRC's HLW regulatory activities are mandated by the Atomic Energy Act of 1954, as amended, and by the Energy Reorganization Act of 1974, and are further set out in the Nuclear Waste Policy Act of 1982, as amended (NWPA), and the Energy Policy Act of 1992. The NWPA specifies a detailed approach for the long-range undertaking of HLW disposal, with the U.S. Environmental Protection Agency (EPA) responsible for developing standards (which the NRC is required to implement) and the U.S. Department of Energy (DOE) responsible for characterizing the site and developing the repository, subject to NRC regulatory oversight. The NWPA directs DOE to characterize only one site at Yucca Mountain in the State of Nevada. For the interim storage of spent nuclear fuel, the NRC's oversight responsibilities include maintaining the operational safety of spent fuel in storage, verifying full-core off-load capability at operating reactor sites, and preparing for dry storage at decommissioned reactors. The NRC's oversight of low-level radioactive waste disposal activities is conducted in accordance with the Low-Level Radioactive Waste Policy Act of 1980, as amended in 1985.

### Budget Overview

Summary	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Budget Authority by Function (\$K)				
Salaries and Benefits	32,890	32,330	30,230	-2,100
Contract Support and Travel	35,417	40,873	39,887	-986
Total Budget Authority	68,307	73,203	70,117	-3,086
FTE	285	273	253	-20

The budget request of \$70.1 million and 253 FTE supports activities associated with decommissioning of nuclear reactors and other facilities, storage of spent nuclear fuel, transportation of radioactive materials, and disposal of radioactive wastes.

The decrease of \$3.1 million reflects completion of structural vulnerabilities assessments for storage and transportation activities, completion of research on probabilistic risk assessment methods for dry cask storage and transportation, identification of efficiencies and discontinuation of a rulemaking effort in the decommissioning program, and a projected reduction in the number of spent fuel storage

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applications. These decreases are partially offset by increases for the Federal pay raise and HLW regulation of the potential repository at Yucca Mountain, Nevada, consistent with DOE's planned license application date of December 2004. The increase also supports prelicensing issue resolution with DOE and preparation for hearings on DOE's potential license application.

### **Measuring Results: Strategic and Performance Goals**

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

#### **Strategic Goal**

In the Nuclear Waste Safety arena, the NRC will conduct an efficient regulatory program to ensure the safe transport, storage, and disposal of radioactive waste that adequately protects public health and safety, and promotes the common defense and security by working to achieve the following strategic goal:

Prevent significant adverse impacts from radioactive waste to the current and future public health and safety and the environment, and promote the common defense and security.

#### **Four Performance Goals and Their Implementing Strategies**

- (1) To maintain safety, protection of the environment, and the common defense and security, the NRC will employ the following strategies:
  - We will continue developing a regulatory framework to increase our focus on safety, including the incremental use of risk-informed and, where appropriate, less-prescriptive performance-based regulatory approaches<sup>1</sup> to maintain safety.
  - We will continue authorizing licensee activities only after determining that those proposed activities will be conducted in a manner that is consistent with the regulatory framework.

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- We will confirm that licensees understand and carry out their primary responsibility for conducting activities in a manner that is consistent with the regulatory framework.
  - We will respond to operational events involving potential safety or safeguards consequences.
  - We will evaluate new information from research, new safety issues, changing external factors, international programs, and licensee operational experience so that improvements can be made to maintain an adequate regulatory framework.
  - We will keep pace with the national high-level waste management program. We will apply the regulatory framework to precicensing reviews and consultations with DOE to resolve the issues that are most important to repository safety and prepare to address a potential licensing decision within the statutory time period.
- (2) To increase public confidence, the NRC will employ the following strategies:
- We will make public participation in the regulatory process more accessible. We will listen to the public's concerns and involve our stakeholders more fully in the regulatory process.
  - We will communicate more clearly. We will add more focus, clarity, and consistency to our message; be timely; and present candid and factual information in the proper context with respect to the risk of the activity.
  - We will continue to enhance the NRC's accountability and credibility by being a well-managed, independent regulatory agency. We will increase efforts to share our accomplishments with the public.
  - We will continue to foster an environment where safety issues can be openly identified without fear of retribution.
  - We will continue to develop and present communication courses to facilitate more effective communication with the public in public meetings and in documents.
  - We will continue to implement the plain language initiatives through staff and supervisor training in techniques for writing in clear, plain language and in including plain-language executive summaries in high-profile reports and documents.



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

- We will continue to improve the regulatory framework to increase our effectiveness, efficiency, and realism.
- We will identify, prioritize, and modify processes based on effectiveness reviews to maximize opportunities to improve those processes.

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

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

### **Performance Measures**

#### **Strategic Goal Measures**

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

STRATEGIC GOAL MEASURES						
	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
<i>No deaths resulting from acute radiation exposures from radioactive waste.</i>						
Target:	0	0	0	0	0	0
Actual:	0	0	0	0		
<i>No events resulting in significant radiation exposures<sup>2</sup> from radioactive waste.</i>						
Target:	0	0	0	0	0	0
Actual:	0	0	0	0		

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STRATEGIC GOAL MEASURES						
	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
<i>No releases of radioactive waste causing an adverse impact on the environment.<sup>3</sup></i>						
Target:	0	0	0	0	0	0
Actual:	0	0	0	0		
<i>No losses, thefts, diversions, or radiological sabotage<sup>4</sup> of special nuclear material or radioactive waste.</i>						
Target:	0	0	0	0	0	0
Actual:	0	0	0	0		

### Performance Goal (PG) Measures

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

PERFORMANCE GOAL MEASURES						
	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
<i>No events resulting in radiation overexposures<sup>5</sup> from radioactive waste that exceed applicable regulatory limits. (PG1)</i>						
Target:	0	0	0	0	0	0
Actual:	0	0	0	0		
<i>No breakdowns of physical protection resulting in a vulnerability to radiological sabotage, theft, diversion, or loss of special nuclear materials or radioactive waste.<sup>6</sup> (PG1)</i>						
Target:	0	0	0	0	0	0
Actual:	0	0	0	0		
<i>No radiological releases<sup>7</sup> to the environment from operational activities that exceed the regulatory limits. (PG1)</i>						
Target:	0	0	0	0	0	0
Actual:	0	0	0	0		

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PERFORMANCE GOAL MEASURES						
	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
<b>No instances where radioactive waste and materials under the NRC's regulatory jurisdiction cannot be handled, transported, stored, or disposed of safely now or in the future.<sup>8</sup> (PG1)</b>						
Target:	0	0	0	0	0	0
Actual:	0	0	0	0		
<b>Complete the milestones relating to collecting, analyzing, and trending information for measuring public confidence. (PG2)</b>						
<u>Milestones:</u>						
FY 2001	Conducted semiannual evaluations of all public meeting feedback forms to identify any trends in NRC public meetings.					
FY 2002	Developed recommendation for continued use of public meeting feedback form or for another method of assessing public confidence.					
FY 2003-04	Create a Web-based system to compile and analyze trends in the responses of the feedback forms to assess the agency's success in meeting performance goals.					
Target:	New measure in FY 2001		Will meet target	Will meet target	Will meet target	Will meet target
Actual:			Met target	Met target		
<b>Complete all of the public outreaches. (PG2)</b>						
<u>Milestones:</u>						
FY 2001	Conducted public meetings in Nevada on Yucca Mountain hearing process.					
FY 2002	Conducted public meetings in Nevada on Final 10 CFR Part 63, Yucca Mountain Review Plan, and sufficiency review (if Site Recommendation by DOE is delivered).					
	Conducted 10 CFR Part 71 public meetings (following publication of proposed rule, prior to final rule).					
FY 2003	Implement public outreach activities described in decommissioning communication plans.					
	Continue to respond to specific requests from affected units of local governments or others for public meetings on various aspects of NRC's HLW program.					
FY 2004	Implement public outreach activities described in decommissioning communication plans.					
	Continue to respond to specific requests from affected units of local governments or others for public meetings on various aspects of NRC's HLW program.					
	Continue to engage the public as we make progress in the resolution of key technical issues.					
	Conduct public outreaches on Package Performance Study.					
Target:	New measure in FY 2001		Will meet target	Will meet target	Will meet target	Will meet target
Actual:			Met target <sup>9</sup>	Met target <sup>10</sup>		
<b>Complete the milestones specific to the agency allegation program effectiveness assessment plan. (PG2)</b>						
<u>Milestones:</u>						
FY 2001	October 2000: Started survey pilot program.					
FY 2002	April 2002: Sent analysis of pilot program to Commission. The Commission has decided to discontinue survey and delete this performance goal measure based on SRM dated October 10, 2002. However, the regional allegation staff will continue to review feedback from individual allegers to identify potential performance problems.					
Target:	New measure in FY 2001		Will meet target	Will meet target	N/A	N/A
Actual:			Met target	Met target		

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PERFORMANCE GOAL MEASURES						
	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
<b>Issue Director's Decisions for petitions filed to modify, suspend, or revoke a license under 10 CFR 2.206<sup>11</sup> within an average of 120 days.<sup>12</sup> (PG2)</b>						
<b>Target:</b>	New measure in FY 2001		120 days	120 days	120 days	120 days
<b>Actual:</b>			No petitions received	Did not meet target <sup>13</sup>		
<b>Complete those specific waste milestones in the Risk-Informed Regulation Implementation Plan (RIRIP). (PG3)</b>						
<u>Milestones:</u>						
<b>FY 2001</b>	October 27, 2000: RIRIP sent to the Commission. November 17, 2000: Commission briefed on RIRIP. August 2001: Developed final criteria and milestones.					
<b>FY 2002-04</b>	Execute milestones from RIRIP (identified at beginning of each fiscal year).					
<b>Target:</b>	New measure in FY 2001		Will meet target	Will meet target	Will meet target	Will meet target
<b>Actual:</b>			Met target	Met target		
<b>Complete at least two key process improvements per year in selected program and support areas that increase effectiveness, efficiency, and realism. (PG3)</b>						
<b>Target:</b>	New measure in FY 2001		Will complete 2 key processes	Will complete 2 key processes <sup>14</sup>	Will complete 2 key processes <sup>15</sup>	Will complete 2 key processes
<b>Actual</b>			Completed 5 key processes. <sup>16</sup>	Completed 3 key processes <sup>17</sup>		
<b>Complete all major prelicensing milestones needed to prepare for a licensing review of the potential Yucca Mountain repository, consistent with DOE's schedules and before DOE submits its license application.<sup>18</sup> (PG3)</b>						
<u>Milestones:</u>						
<b>FY 2000</b>	Commented on DOE's draft Environmental Impact Statement. Resolved key technical issues at the staff level (FY 2000-FY 2003).					
<b>FY 2001</b>	Issued in June 2001, final regulation in 10 CFR Part 63 (previously FY 2000, currently FY 2001) in FY 2001, conformed to final EPA standard for the potential Yucca Mountain repository Commented on DOE's Draft Supplemental Environmental Impact Statement.					
<b>FY 2002</b>	Drafted Yucca Mountain Review Plan (previously FY 2001; currently FY 2002). Commented on Site Characterization Sufficiency (previously FY 2001; currently FY 2002, in response to an additional DOE request). Integrated Issue Resolution Status Report (FY 2002 and FY 2003). Reviewed DOE's Final Environmental Impact Statement.					
<b>FY 2003</b>	Final Yucca Mountain Review Plan.					
<b>FY 2004</b>	Certification of License Support Network.					
<b>Target:</b>	N/A	Will meet target	Will meet target	Will meet target	Will meet target	Will meet target
<b>Actual:</b>		2 of 3 milestones were completed	3 of 5 milestones were completed <sup>19</sup>	4 of 5 milestones were completed <sup>20</sup>		

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PERFORMANCE GOAL MEASURES						
	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
<b>Complete those specific milestones to reduce unnecessary regulatory burden. (PG4)</b>						
<b>Milestones:</b>						
<b>FY 2001</b>	Reviewed and made recommendations for improving the Part 72 Cask Certification Process, including the resolution of the Nuclear Energy Institute petition.					
<b>FY 2003</b>	If an application to adopt the Standard Technical Specifications (STS) for a specific cask design is received, staff will begin a complete review of the application. Staff will issue Integrated Issue Resolution Status Report of technical information pertinent to the review of potential high-level waste repository.					
<b>FY 2004</b>	If an application for STS adoption is approved, staff will complete rulemaking to approve STS adoption for the specific cask design.					
<b>Target:</b>	New measure in FY 2001		Will meet target	No target established	Will meet target	Will meet target
<b>Actual:</b>			Met target	No target established		

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### **Budget Authority and Full-time Equivalent Employment by Program**

Summary	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Budget Authority by Program (\$K)				
High-Level Waste Regulation	23,650	24,900	33,100	8,200
Spent Fuel Storage and Transportation Licensing and Inspection	12,417	12,655	11,957	-698
Regulation of Decommissioning	11,597	10,621	8,930	-1,691
Environmental Protection and Low-Level Waste Management	3,050	3,706	4,834	1,128
Homeland Security	4,280	4,253	640	-3,613
Waste Safety Research	10,697	14,355	8,358	-5,997
State and Tribal Programs	232	120	0	-120
Waste Technical Training	548	689	708	19
Waste Safety Legal Advice	1,201	1,327	999	-328
Waste Adjudication	635	577	591	14
Total Budget Authority	68,307	73,203	70,117	-3,086

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Summary	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Full-Time Equivalent Employment by Program				
High-Level Waste Regulation	68	69	76	7
Spent Fuel Storage and Transportation Licensing and Inspection	71	69	67	-2
Regulation of Decommissioning	80	67	53	-14
Environmental Protection and Low-Level Waste Management	13	12	14	2
Homeland Security	6	7	5	-2
Waste Safety Research	28	29	22	-7
State and Tribal Programs	2	1	0	-1
Waste Technical Training	3	4	4	0
Waste Safety Legal Advice	10	11	8	-3
Waste Adjudication	4	4	4	0
Total FTE	285	273	253	-20

### Justification of Program Requests

The Nuclear Waste Safety Arena comprises 10 programs. This section discusses those programs with significant activities or resource changes.

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### High-Level Waste Regulation

	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Budget Authority by Function (\$K)				
Salaries and Benefits	7,880	8,047	8,629	582
Contract Support and Travel	15,770	16,853	24,471	7,618
Total Budget Authority	23,650	24,900	33,100	8,200
FTE	68	69	76	7

**FY 2004 Activities.** This program fulfills the NRC's statutory responsibilities regarding the potential DOE application for a HLW repository. Congress has approved the President's recommendation of the Yucca Mountain site in Nevada, and DOE plans to submit its license application in December 2004. During FY 2004, the NRC will continue to resolve key technical issues as part of the prelicensing consultation process with DOE (Figure 1). The NRC will give priority to those issues that are most important to the expected performance and safety of the repository (Figure 2). Resolution of the key technical issues helps to ensure that DOE's license application is of high quality so that the NRC can reach a decision on the proposed license. The NRC will

<b>FIGURE 1</b>						
<i>Output Measure: Resolve key technical issue (KTI) subissues.</i>						
	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
<b>Target:</b>	Resolve ≥ 5 KTI subissues	Resolve ≥ 5 KTI subissues	Continue to resolve KTIs at staff level	Resolve KTI integrated subissues with closure on 60 agreements	Resolve KTI integrated subissues/keep pace with DOE schedule	Resolve KTI integrated subissues/keep pace with DOE schedule
<b>Actual:</b>	5 KTI subissues resolved	12 KTI subissues resolved	Resolved all subissues identified*	Reviewed and closed 46 agreements**		
* This measure was met as staff reached "closed" or "closed pending" status on all subissues identified for resolution in FY 2001, or reached agreement with DOE to provide additional information by a certain date.						
** Delays in DOE's program prevented accomplishment of closure on 14 of the 60 scheduled agreements.						

<b>FIGURE 2</b>						
<i>Output Measure: The activities necessary to make a decision on DOE's repository license application will be planned and executed as such that the decision can be made on time or ahead of schedule and within requested budget resources.</i>						
<i>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 each of their due dates.</i>						
	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
<b>Target:</b>	N/A	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	Meet milestones within 90 days of due date
<b>Actual:</b>	N/A	Met milestones within 90 days*	Met milestones within 90 days**	Met milestones within 90 days***		
* Provided comments on DOE's Part 963, completed revisions 0 and 1 of the Yucca Mountain Review Plan, completed total performance assessment code to verify staff review findings on any licensing decision.						
** Provided comments on draft environmental impact statement, 10 CFR Part 63 finalized to conform with EPA regulation 40 CFR 197, and provided comments in DOE on nine Process and Model Reports and numerous Analysis and Model Reports.						
*** Completed draft Yucca Mountain Review Plan, completed Site Characterization Sufficiency Comments, reviewed DOE's Final Environmental Impact Statement, and issued Integrated Issue Resolution Status Report.						



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also meet the milestones set for FY 2004 so that the agency can make its licensing decision on time or ahead of schedule. In FY 2004, the NRC also expects to certify the License Support Network.

During FY 2003, the NRC will complete two activities that are key to the agency's review of DOE's potential license application. First, the NRC will publish a final amendment to "Implementing Regulation for Disposal of High-Level Waste at Yucca Mountain," 10 CFR Part 63 (Figure 3). Second, the NRC will complete the final Yucca Mountain Review Plan, after incorporating public comments (Figure 4). This plan uses a risk-informed approach that will enable the NRC staff to focus its review of a potential DOE license application according to risk-significance.

During FY 2002, the NRC completed preliminary site-sufficiency comments, based on a body of work conducted during a 10-year period and the results of the agency's performance assessment (Figure 5). Additionally, the NRC completed its review of DOE's final environmental impact statement (EIS) for the Yucca Mountain Site (Figure 9).

The NRC will also continue its onsite representation at Yucca Mountain, and observe approximately 8 DOE quality assurance audits to evaluate the effectiveness of DOE's quality assurance program. To achieve the performance goal of increasing public confidence, resources support communicating with stakeholders and making the regulatory process accessible to interested stakeholders. In addition, the Package Performance Study will address the performance of spent

<b>FIGURE 3</b> <b>Output Measure: Establish a site-specific, performance-based regulation applicable to the proposed repository at Yucca Mountain.*</b>						
	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Target:	Publish proposed regulation	Publish final regulation	Publish final regulation**	Publish proposed amendment to 10 CFR Part 63 and prepare final rule	Publish final amendment to 10 CFR Part 63	N/A
Actual:	Published 2/22/99	Target not met*	Final 10 CFR Part 63 approved by Commission 9/7/01, transmitted to OMB 9/20/01, published 11/2/01	Issued final rule for the proposed repository at Yucca Mountain, 10 CFR Part 63		
* Target was not met because of a lack of resolution of complex issues concerning Yucca Mountain standards. ** EPA standard was issued in June 2001 and NRC 10 CFR Part 63 conformed to standards provided by EPA.						

<b>FIGURE 4</b> <b>Output Measure: Development of the Yucca Mountain Review Plan (YMRP).</b>						
	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Target:	Initial YMRP format and content	Publish draft YMRP	Publish draft YMRP	Publish draft YMRP and obtain public comments	Complete final YMRP	N/A
Actual:	Completed 5/26/99	Not met*	Not met*	Published Revision 2 of the Yucca Mountain Review Plan for public comment		
* Target not met because of a lack of resolution of complex issues concerning Yucca Mountain standards.						

<b>FIGURE 5</b> <b>Output Measure: Comment on DOE's High-Level Waste Program.</b>						
	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Target:	Comment on Viability Assessment	Comment on draft EIS	Preliminary comments on site sufficiency	Preliminary comments on site sufficiency (Completes output)	N/A	N/A
Actual:	Completed 6/2/99	Completed 2/22/00	Target no longer applicable*	Provided site characterization sufficiency comments		
* In July 2001, DOE requested that the NRC include an additional document, "Supplemental Science and Performance Analyses," in its review and extended the date to November 2001. Due to the request for review of the additional document, and the extension of the due date, the FY 2001 target was no longer applicable.						

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nuclear fuel shipping containers in severe rail and highway accidents, by testing full-scale rail and truck casks. Our budget anticipates that both DOE and the international community will also provide resources to participate in the testing.

The NRC will prepare for hearings on DOE's potential license application, which are expected to be highly contested and involve as many as 12 to 15 parties in litigation that must be completed within a 3-year statutory deadline. In FY 2004, hearing preparation activities will include (1) testing, document processing, and refreshing hardware and software for NRC's Licensing Support Network, which provides public and Federal, State, and local governmental access to hearing-related documents; (2) constructing hearing space in Nevada; (3) developing and implementing a Digital Data Management System to be used in the hearing rooms, with the audiovisual components completed in the hearing room in the Headquarters Offices in Rockville, Maryland, during FY 2004 and work initiated during FY 2004 to implement information and audiovisual components for the hearing space in Nevada; (4) providing legal advice and counsel, as well as representation, for license application review and pre-hearing activities; and (5) providing services (such as transcription and law clerk support) for discovery disputes and pre-hearing activities.

*Change from FY 2003.* Resources increase in FY 2004 because of (1) prelicensing resolution of the issues that are most important to repository safety and licensing, in preparation for the expected receipt of DOE's license application; (2) the shift of resources for the Package Performance Study to be funded from the Nuclear Waste Fund in the HLW program; and (3) preparation for hearings on DOE's potential license application, including hearing room construction and the development and implementation of information systems.

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### *Spent Fuel Storage and Transportation Licensing and Inspection*

	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Budget Authority by Function (\$K)				
Salaries and Benefits	8,118	8,157	8,118	-39
Contract Support and Travel	4,299	4,498	3,839	-659
Total Budget Authority	12,417	12,655	11,957	-698
FTE	71	69	67	-2

**FY 2004 Activities.** The NRC will license, certify, and inspect the interim storage of spent fuel from nuclear reactors and the domestic and international transportation of radioactive materials. The NRC expects to review 3 new applications and 1 renewal for independent spent fuel storage installations (ISFSI) at commercial nuclear power plants, in addition to continuing to review an application for an ISFSI at a DOE facility, and reviewing several amendment requests for existing ISFSIs. The NRC will complete the reviews of transport container designs and storage container and installation designs in a timely manner, as defined by the output measures (Figures 6 and 7). These reviews address maintaining the safety of spent fuel in storage and determining whether the designs of spent fuel transportation containers meet the NRC's safety and operational requirements. In addition, the NRC will complete approximately 10 safety inspections in FY 2004, as well as approximately 40 reviews of quality assurance programs, to ensure that safety measures are correctly implemented by licensees and others responsible for NRC-certified spent fuel storage systems and transport packages.

<b>FIGURE 6</b>						
<i>Output Measure: Transport container design review completions.*</i>						
	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Target:	120	74	74	100	80% ≤ 8 months 100% ≤ 2 years	80% ≤ 8 months 100% ≤ 2 years
Actual:	126	96	79	72**		

\* Output modified in FY 2003 to exclude Request for Additional Information response time from the target completion time.  
 \*\* The storage and transportation casework was heavily impacted during FY 2002, as a result of redirection of staff efforts to response activities associated with the terrorist attacks on September 11, 2001, and follow-on vulnerability assessments; thus, fewer cases were completed in FY 2002 than initially projected.

<b>FIGURE 7</b>						
<i>Output Measure: Storage container and installation design review completions.*</i>						
	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Target:	25	30	25	40	80% ≤ 14 months 100% ≤ 2 years	80% ≤ 14 months 100% ≤ 2 years
Actual:	43	62	62	36**		

\* Output modified in FY 2003 to exclude Request for Additional Information response time from the target completion time.  
 \*\* The storage and transportation casework was heavily impacted during FY 2002, as a result of redirection of staff efforts to response activities associated with the terrorist attacks on September 11, 2001, and follow-on vulnerability assessments; thus, fewer cases were completed in FY 2002 than initially projected.

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*Change from FY 2003.* Resources decrease in licensing and inspection, primarily as a result of a reduction in the projected number of spent fuel storage amendments.

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### *Regulation of Decommissioning*

	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Budget Authority by Function (\$K)				
Salaries and Benefits	9,048	7,790	6,324	-1,466
Contract Support and Travel	2,549	2,831	2,606	-225
Total Budget Authority	11,597	10,621	8,930	-1,691
FTE	80	67	53	-14

**FY 2004 Activities.** Decommissioning involves removing radioactive contamination in buildings, equipment, groundwater, and soil to levels that allow a facility or site to be released for either unrestricted or restricted use. In FY 2004, the NRC will conduct decommissioning licensing and inspection activities at 19 power reactors, as well as 25–30 sites listed in the Site Decommissioning Management Plan (SDMP) and other complex and formerly licensed sites. Sites listed in the SDMP are those that have unusual or complex cleanup challenges, such as a great deal of soil contamination, potential or actual groundwater contamination, or contaminated, unused buildings. Removal of a site from the SDMP list signifies its successful remediation (Figure 8). The NRC reviews the decommissioning plans for SDMP and other contaminated sites, as well as the license termination plans for reactors, to ensure that the plans meet environmental and safety requirements and to prompt timely decommissioning. The 90-day acceptance reviews ensure that the decommissioning plans contain sufficient information for the staff to perform its more detailed review (Figure 8). The NRC also conducts inspections to evaluate licensees' abilities to manage the use of reactor decommissioning funds, as described in the NRC's regulations, and to decontaminate power reactor plants and SDMP and other sites in a safe manner.

<b>FIGURE 8</b> <b>Output Measure: Cleanup problem materials and fuel facility sites</b> <b>listed in the Site Decommissioning Management Plan (SDMP).</b>						
	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
<b>Target:</b>	Remove 3 sites from SDMP list	Remove 3 sites from SDMP list	Remove 1 site from SDMP list	Remove 1 site from SDMP list	Remove 1 site from SDMP list Conduct 90-day Acceptance Review*	Remove 1 site from SDMP list Conduct 90-day Acceptance Review*
<b>Actual:</b>	3 sites removed	3 sites removed (Pezzes, Minnesota Mining, and Watertown)	1 site removed (Cabot-Performance Metals)	1 site removed (Lake City Army Ammunition Plant)		
* Output modified in FY 2003 to conduct 90-day Acceptance Review on decommissioning plans and license termination plans submitted.						

## **NUCLEAR WASTE SAFETY**

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In addition, the NRC will continue overseeing the West Valley Demonstration Project and supporting the development of DOE's decommissioning and/or long-term stewardship draft EIS, as well as continuing to work with DOE on its evaluations of waste incidental to reprocessing. The NRC will also continue to interact with EPA to resolve issues of mutual concern related to the regulation of radionuclides in the environment to avoid unnecessary duplication of regulatory requirements. As part of this effort, the NRC will actively participate in the Interagency Steering Committee on Radiation Standards. The NRC will also continue to operate the Computerized Risk Assessment and Data Analysis Lab to assist NRC staff in reviewing applicant site characterization activities and engineered facilities by supporting the geographic information system and three-dimensional modeling needed for decommissioning and EIS casework.

*Change from FY 2003.* Resources decrease for power reactor decommissioning rulemaking and guidance activities, including discontinuing the integrated rulemaking effort and related generic regulatory activities. Resources for materials facilities decrease in FY 2004 because of the identification of efficiencies in the manner in which the staff manages the Decommissioning program.

## NUCLEAR WASTE SAFETY

### *Environmental Protection and Low-Level Waste Management*

	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Budget Authority by Function (\$K)				
Salaries and Benefits	1,493	1,427	1,707	280
Contract Support and Travel	1,557	2,279	3,127	848
Total Budget Authority	3,050	3,706	4,834	1,128
FTE	13	12	14	2

**FY 2004 Activities.** The NRC will review environmental reports from licensees and applicants and prepare EISs for the construction, operation, and decommissioning of fuel cycle and spent nuclear fuel facilities, uranium recovery sites, and reactor and other non-routine decommissioning projects. Specifically, in FY 2004, the NRC will complete one final and one draft EIS. The environmental protection program will also review EISs prepared by other Federal and State agencies, prepare environmental assessments, review environmental assessments and EISs of other NRC organizations, and finalize EIS guidance (Figure 9).

In its regulatory activities for low-level waste, the NRC will license onsite disposal for low-level waste,

<b>FIGURE 9</b> <i>Output Measure: Support NMSS licensing activities by preparing and/or reviewing required environmental reports.</i>			
	FY 2002	FY 2003	FY 2004
<b>Target:</b>	Complete 1 draft EIS Review 1 EIS of another agency	Complete 1 final EIS Publish NUREG-1748, "Environmental Review Guidance for Licensing Actions Associated with NMSS Programs"*	Complete 1 final EIS and 1 DEIS*
<b>Actual:</b>	Reviewed 1 final EIS of another agency (DOE's final EIS for the Yucca Mountain Site)**		

\* 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.

\*\* Did not meet the target for completing 1 draft EIS (DEIS): the MOX DEIS was delayed because DOE revised its surplus plutonium disposition program, and the Sequoyah Fuels Corporation DEIS was delayed because of a licensee request for reclassification of its waste as 113.(2) byproduct material, which changed the method for decommissioning.

<b>FIGURE 10</b> <i>Output Measure: Maintenance of regulatory framework for low-level waste disposal.</i>						
	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
<b>Target:</b>	N/A	Complete Branch Technical Position on LLW Disposal Facility Performance Assessment	None	Provide technical assistance to requesting Agreement States 90% of the time within agreed upon schedule	Provide technical assistance to requesting Agreement States 90% of the time within agreed upon schedule  Initiate technical support on low activity mixed waste*	Provide technical assistance to requesting Agreement States 90% of the time within agreed upon schedule  Complete assured isolation rulemaking plan
<b>Actual:</b>	N/A	Completed NUREG on LLW Disposal Facility Performance Assessment**	None	Met target		

\* 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.

\*\* Formerly referred to as the Branch Technical Position on LLW Disposal Facility Performance Assessment.

## **NUCLEAR WASTE SAFETY**

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provide timely technical support to Agreement States, and conduct import/export reviews (Figure 10). The NRC will also develop a plan for rulemaking on assured isolation of low-level waste and consider whether to proceed with a regulating this method of waste management, which is neither permanent nor near-surface disposal as defined by the NRC's regulations.

*Change from FY 2003.* Resources increase because of the increased workload for reviewing environmental assessments and EISs and to accelerate preparation of the EIS for the Sequoyah Fuels fuel manufacturing facility.



## NUCLEAR WASTE SAFETY

### Homeland Security

	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Budget Authority by Function (\$K)				
Salaries and Benefits	703	837	640	-197
Contract Support and Travel	3,577	3,416	0	-3,416
Total Budget Authority	4,280	4,253	640	-3,613
FTE	6	7	5	-2

**FY 2004 Activities.** The NRC will continue to support safeguards and security efforts to ensure continued licensee implementation of the 2002 interim compensatory measures (ICMs) and to examine vulnerabilities to certain spent fuel and non-spent fuel transportation packages and storage cask designs from terrorist threats. The NRC will also continue to conduct a comprehensive review of safeguards and security programs initiated in FY 2002. This effort will include issuing revised design-basis threats, implementing additional compensatory measures for all classes of facilities when appropriate, rulemakings and other regulatory actions, evaluating the impact of the security program requirements on licensees, conducting vulnerability assessments, and evaluating the overall capability for protection of nuclear facilities as a part of the Nation's infrastructure. The NRC will coordinate all of these efforts with the new Department of Homeland Security in FY 2003.

**Change from FY 2003.** Resources decrease because of the completion of the structural vulnerabilities assessments for storage and transportation activities.

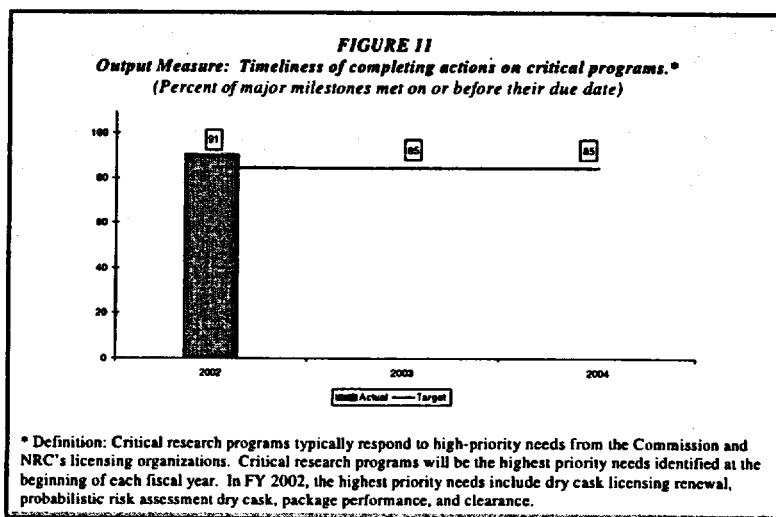
## NUCLEAR WASTE SAFETY

### Waste Safety Research

	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Budget Authority by Function (\$K)				
Salaries and Benefits	3,472	3,720	2,888	-832
Contract Support and Travel	7,225	10,635	5,470	-5,165
Total Budget Authority	10,697	14,355	8,358	-5,997
FTE	28	29	22	-7

**FY 2004 Activities.** The NRC will support research activities that provide data and models for staff assessment of public exposure to environmental releases of radioactive material. Research activities will provide the technical basis to assess long-term compliance with decommissioning requirements and the release of solid materials. Resources will also support development and demonstration of probabilistic risk assessment methods for dry cask storage and transportation, and seismic design and license renewal of ISFSIs. The NRC will also place significant emphasis on continuing and increasing coordination with other Federal agencies that have related research programs.

The NRC's critical research programs are the highest priority needs identified at the beginning of each fiscal year and typically respond to high-priority needs from the Commission and NRC's licensing organizations. In response to the output measure of the timeliness of completing actions on critical programs, the agency will respond to high-priority needs on or before their due date 85 percent of the time (Figure 11). Timeliness is measured across arenas.



## **NUCLEAR WASTE SAFETY**

***Change from FY 2003.*** Resources decrease because of the shift of Package Performance Study funding to the Nuclear Waste Fund in the HLW program and the completion of the dry cask probabilistic risk assessment.

## NUCLEAR WASTE SAFETY

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### ARENA NOTES

1. Stated succinctly, "risk-informed, performance-based regulation" is an approach in which risk insights, engineering analysis and judgment, and performance history are used to (1) focus attention on the most important activities, (2) establish objective criteria based upon risk insights for evaluating performance, (3) develop measurable or calculable parameters for monitoring system and licensee performance, and (4) focus on the results as the primary basis of regulatory decisionmaking.
2. "Significant radiation exposures" are defined as those exposures that result in unintended permanent functional damage to an organ or a physiological system as determined by a physician.
3. Releases that have the potential to cause "adverse impact" are currently undefined. As a surrogate, we will use those that exceed the limits for reporting abnormal occurrences as given by Abnormal Occurrence criteria 1.B.1[(normally 5,000 times Table 2 (air and water) of Appendix B, Part 20)].
4. In accordance with Appendix G to 10 CFR Part 73 and 10 CFR 74.11(a).
5. "Overexposures" are those exposures that exceed the dose limits specified in 10 CFR 20.2203(a)(2) as tracked in the Nuclear Materials Events Database.
6. The NRC recognizes that no explicit reporting requirements exist for substantiated breakdown determination. The NRC relies on its safeguards inspection findings and licensee notifications.
7. Releases that have a 30-day reporting requirement under 10 CFR 20.2203(a)(3).
8. Measuring the protection of future generations over the planning period of the next 5 years is a unique challenge which the Commission is continuing to evaluate.
9. Met target. Completed public meetings on HLW hearing process: May 22, 2001, Pahrump, NV; May 23, 2001, Las Vegas, NV; May 24, 2001, Mesquite, NV; and September 26-27, 2001, Tribal interaction at Las Vegas, NV.
10. Met target. Conducted eight public meetings in Nevada that addressed the Yucca Mountain Review Plan, 10 CFR Part 63, and Site Sufficiency comments, along with broader topics such as the licensing process, and conducted two public meetings on 10 CFR Part 71.
11. A 10 CFR 2.206 petition is a written request filed by any person to institute a proceeding to modify, suspend, or revoke a license, or for any other enforcement action. The petition specifies the action requested and sets forth the facts that constitute the basis for the request. The NRC evaluates the technical merits of the safety concern presented by the petition. Based on the facts determined by the NRC technical evaluation or investigation of the merits of the petition, the Director will issue a decision to grant the petition, in whole or in part, or deny the petition. The Director's Decision explains the bases upon which the petition has been granted and identifies the actions that NRC staff has taken or will take to grant the petition in whole or in part. Similarly, if the petition is denied, the

## **NUCLEAR WASTE SAFETY**

Director's Decision explains the bases for the denial and discusses all matters raised by the petitioner in support of the request.

12. The start of the 120-day period is the date that the Petition Review Board determines that the proposed petition satisfies the criteria of NRC Management Directive 8.11, "Review Process for 10 CFR 2.206 Petitions," and acknowledges by letter the petitioner's request. For petitions received after October 1, 2000, the end time is the date of the proposed Director's Decision. Supplements to the petition which require extension of the schedule will reset the beginning of the metric to the date of a new acknowledgment letter.
13. The NRC received a number of security-related petitions in FY 2002. Because of the concentrated security-related efforts that were undertaken during this time, there was a need to address the security-related concerns raised by these petitions in an integrated fashion with the benefit of the interim compensatory measures (ICMs) and the orders that followed the ICMs. Therefore, in order to fully evaluate the issues, the NRC took longer than the 120-day goal to complete its review and issue a decision.
14. Key processes planned for FY 2002 included conducting business process improvement reviews of (1) licensing activities conducted at headquarters and in the regional offices, and (2) contract financial management activities.
15. Key processes planned for FY 2003 include conducting business process improvement reviews of (1) inspection activities conducted at headquarters and the regional offices, and (2) workload planning and workflow processes.
16. The key processes completed in FY 2001 included (1) development and implementation of a more efficient and focused region decommissioning inspection program; (2) development and implementation of a phased review of decommissioning plans for restricted release sites; (3) development of guidance for changing licensing termination plans without requiring a license amendment; (4) conducting an annual self-assessment of the process for resolving the key technical issues for licensing a potential high-level waste repository at the Yucca Mountain Nevada site; and (5) issuance of generic guidance for implementing revisions to 10 CFR 72.48, "Changes, Tests, and Experiments."
17. The key process reviews completed in FY 2002 included (1) HLW Risk Insights Initiative, (2) Guidance Consolidation for Decommissioning, Volume 1, and (3) Risk-Informing the ISFSI Inspection Program.
18. Prelicensing activities such as this constitute informal conferences between a prospective applicant and the staff and are not part of a potential licensing proceeding.
19. The NRC complete three of the five milestones including (1) the final regulation in 10 CFR Part 63, (2) continued resolution of (1) key technical issues and closure on five key technical subissues, and (3) commenting on DOE's draft supplemental environmental impact statement.

## **NUCLEAR WASTE SAFETY**

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20. The NRC completed four of the five milestones including (1) the draft Yucca Mountain Review Plan, (2) the Site Characterization Sufficiency Comments, (3) the Integrated Issue Resolution Status Report, and (4) the review of DOE's final environmental impact statement. While the staff continued efforts to resolve key technical issues, it was not possible to close all of the agreements scheduled for FY 2002 because of the timing of receipt of information from DOE. None the less, the staff succeeded in closing 46 of the 60 agreements that were scheduled to be closed in FY 2002.

# **INTERNATIONAL NUCLEAR SAFETY SUPPORT**

## INTERNATIONAL NUCLEAR SAFETY SUPPORT

The International Nuclear Safety Support arena encompasses the NRC's formulation of international nuclear safety and regulatory policy; import/export licensing for nuclear materials and equipment; treaty implementation; international information exchange; international safety, safeguards and security assistance and cooperation; and nuclear proliferation deterrence. The agency's international activities support broad U.S. national interests, as well as the NRC's domestic mission. The legal basis for these activities is the Atomic Energy Act of 1954, as amended, the Energy Reorganization Act of 1974, as amended, the Nuclear Nonproliferation Act of 1978, and other statutes, executive orders, treaties, and conventions.

### Budget Overview

Summary	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Budget Authority by Function (\$K)				
Salaries and Benefits	4,371	4,532	4,674	142
Contract Support and Travel	681	705	694	-11
Total Budget Authority	5,052	5,237	5,368	131
FTE	38	38	38	0

6 The budget request of \$5.4 million and 38 FTE supports the NRC's ability to maintain a program of international cooperation to help enhance the safe, secure, and environmentally acceptable civilian uses of nuclear materials both in the U.S. and throughout the world. This includes working with international organizations such as the International Atomic Energy Agency and the Nuclear Energy Agency; issuing 90–130 import/export licenses per year; and conducting activities to ensure compliance with statutes, treaties, conventions, and agreements for cooperation and support for work sponsored by the Agency for International Development for the countries of the Former Soviet Union and Central and Eastern Europe. As the regulator of the world's largest civilian nuclear program, the NRC has extensive regulatory experience to contribute to international programs in areas such as nuclear reactor safety, nuclear safety research, radiation protection, nuclear materials safety and safeguards,<sup>1</sup> waste management, and decommissioning of nuclear facilities. The NRC can, in turn, learn from the regulatory experience of other countries. In particular, the NRC gains access to non-U.S. safety and regulatory policy information through interaction with foreign entities, thereby leveraging the agency's resources. Additionally, the NRC supports the development and implementation of international regulatory standards, policies, and practices. The increase of



## **INTERNATIONAL NUCLEAR SAFETY SUPPORT**

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\$0.1 million is for increased salaries and benefits primarily associated with the Governmentwide FY 2004 pay raise.

### **Measuring Results: Strategic Goal and Implementing Strategies**

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

#### **Strategic Goal**

In the International Nuclear Safety Support arena, the NRC will conduct activities that encompass international nuclear policy formulation, export-import licensing for nuclear materials and equipment, treaty implementation, nuclear proliferation deterrence, international safety assistance, and safeguards support and assistance by working to achieve the following strategic goal:

Support U.S. interests in the safe and secure use of nuclear materials and in nuclear nonproliferation.<sup>2</sup>

#### **Implementing Strategies**

To achieve its strategic goal for international nuclear safety support, the NRC will employ the following strategies:

- We will continue to take a proactive<sup>3</sup> role, as appropriate, in strengthening safety, safeguards, and nonproliferation worldwide.
- We will focus appropriate agency activities and resources on significant international nuclear safety obligations and on U.S. and NRC international priorities.
- We will enhance the integration of international activities within the NRC.

## INTERNATIONAL NUCLEAR SAFETY SUPPORT

### Performance Measures

STRATEGIC GOAL MEASURES						
	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
<i>Fulfills 100 percent of the significant<sup>4</sup> obligations over which the NRC has regulatory authority arising from statutes, treaties, conventions, and Agreements for Cooperation.<sup>5</sup></i>						
Target:	100 percent	100 percent	100 percent	100 percent	100 percent	100 percent
Actual:	100 percent	100 percent	100 percent	100 percent		
<i>No significant proliferation incidents attributable to some failure of the NRC.</i>						
Target:	N/A	0	0	0	0	0
Actual:	N/A	0	0	0		
<i>No significant safety or safeguards events that result from the NRC's failure to implement its international commitments.</i>						
Target:	N/A	0	0	0	0	0
Actual:	N/A	0	0	0		

## INTERNATIONAL NUCLEAR SAFETY SUPPORT

### Budget Authority And Full-time Equivalent Employment by Program

Summary	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Budget Authority by Program (\$K)				
Participation in International Activities	4,246	4,414	4,478	64
Homeland Security	806	823	890	67
Total Budget Authority	5,052	5,237	5,368	131
Full-Time Equivalent Employment by Program				
Participation in International Activities	32	32	32	0
Homeland Security	6	6	6	0
Total FTE	38	38	38	0

**FY 2004 Activities.** The NRC will negotiate and/or renew 3 to 6 technical exchange arrangements (involving both classified and unclassified information) with appropriate foreign counterparts to enhance the safety and security of peaceful nuclear activities within the United States and throughout the world (Figure 1).

The NRC will continue staff reviews of Executive Branch proposals within 60 days for all cases involving non-nuclear weapon states (Figure 2). The NRC will also complete reviews for and issue approximately 90 to 130 import/export authorizations

<b>FIGURE 1</b>						
<i>Output Measure: Negotiate and/or renew bilateral technical exchange arrangements between the NRC and appropriate foreign counterparts to ensure that an effective framework is in place for the NRC's international exchanges.</i>						
	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Target:	5	5	3-6	3-6	3-6	3-6
Actual:	4*	8	4**	8		
* Completed four arrangements, with the fifth arrangement awaiting the appointment of a new executive official in South Africa. ** While four arrangements were negotiated in FY 2001, none were signed because signing ceremonies were cancelled as a result of the terrorist attacks on September 11, 2001.						

<b>FIGURE 2</b>						
<i>Output Measure: Reviews of Executive Branch proposed Part 810 licenses, subsequent arrangements, and Section 123 Agreements for Cooperation.</i>						
<i>Target: Complete staff reviews for all cases involving non-nuclear weapon states.</i>						
	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Target:	Complete reviews < 60 days	Complete reviews < 60 days	Complete reviews < 60 days	Complete reviews < 60 days	Complete reviews < 60 days	Complete reviews < 60 days
Actual:	100% < 60 days (23 reviews)	100% < 60 days (16 reviews)	100% < 60 days (11 reviews)	100% < 60 days (10 reviews)		

## INTERNATIONAL NUCLEAR SAFETY SUPPORT

(NRC licenses or amendments)  
(Figure 3).

*Change from FY 2003.* The resource increase in the International Nuclear Safety Support program is primarily attributable to the Governmentwide pay raise.

<b>FIGURE 3</b>						
<i>Output Measure: Issuance of NRC licenses.</i>						
<i>Target: Complete review for and issue as appropriate NRC import/export authorizations (NRC licenses or amendments).</i>						
	<b>FY 1999</b>	<b>FY 2000</b>	<b>FY 2001</b>	<b>FY 2002</b>	<b>FY 2003</b>	<b>FY 2004</b>
<b>Target:</b>	75-100 Complete 90% cases < 60 days	75-100 Complete 90% cases < 60 days	85-125 Complete 100% cases < 60 days	85-125 Complete 100% cases < 60 days	85-125 Complete 100% cases < 60 days	90-130 Complete 100% cases < 60 days
<b>Actual:</b>	100% < 60 days (103 reviews)	100% < 60 days (156 reviews)	100% < 60 days (122 reviews)	100% < 60 days (104 reviews)		

## **INTERNATIONAL NUCLEAR SAFETY SUPPORT**

### **ARENA NOTES**

1. "Domestic safeguards" are those nuclear material control and accounting measures and physical protection measures implemented by and within *any* country, including the United States, to prevent sabotage of nuclear materials or facilities or theft or diversion of nuclear materials by an individual or a group within that country. Secure use of nuclear materials is achieved through the successful implementation of domestic safeguards. International safeguards are the independent verifications performed by the International Atomic Energy Agency of a country's "peaceful use" declarations on nuclear materials and nuclear facilities. Nuclear nonproliferation means control over or deterrence of the spread of nuclear explosive devices.
2. "Nuclear materials" include source, special nuclear, and byproduct materials, as defined in the Atomic Energy Act of 1954 (Title 1, Chapter 2, Section II).
3. The NRC's proactive efforts help to ensure that international outcomes are consistent with U.S. goals. The NRC works collaboratively with other U.S. Government agencies to identify and frame U.S. interests and in cooperation with regulatory and safety entities from other countries addressing the same interests. The NRC provides international leadership to advance U.S. policy interests and provides support to countries that have taken leadership in advancing issues of mutual concern. The NRC represents the United States in international meetings, provides regulatory policy guidance and technical assistance to other countries and international organizations, and holds positions of influence and/or chairs and participates in interagency and international committees to help us guide the direction and scope of important international safety, safeguards, and nonproliferation initiatives.
4. "Significant" is defined as incidents that would include a loss by theft or diversion of one or more kilograms of weapons-grade uranium or plutonium, the detonation by a non-nuclear weapon state of a nuclear explosive device, or the abrogation of Nonproliferation Treaty safeguards commitments by a non-nuclear weapon state.
5. Government-to-Government agreements for Cooperation in the Civil/Peaceful Use of Nuclear Energy are required under Section 123 of the Atomic Energy Act of 1954, as amended, to establish the legal framework for technical cooperation in the production and use of special nuclear material, as well as for the supply of such material or fuel cycle equipment, or related sensitive information, to another country or international organization. These Agreements for Cooperation (or Section 123 Agreements, as they are also known) include such nonproliferation conditions and controls as safeguards commitments; a guarantee of no explosive or military use; a guarantee of adequate physical protection; and U. S. rights to approve retransfers, enrichment, reprocessing, other alterations in form or content, and storage of U.S.-supplied or derived material. They must be in effect before an NRC export license can be issued.

## **MANAGEMENT AND SUPPORT**

## MANAGEMENT AND SUPPORT

Management and Support encompasses the NRC's administrative and logistical support, human resources management, training and development, small and disadvantaged businesses and civil rights, information resources management, planning and budget analysis, accounting and finance, and policy support services to the program area staff in performing their regulatory mission activities and achieving their performance goals.

### Budget Overview

Summary	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Budget Authority by Function (\$K)				
Salaries and Benefits	62,848	64,773	67,154	2,381
Contract Support and Travel	98,164	101,030	99,111	-1,919
Total Budget Authority	161,012	165,803	166,265	462
FTE	600	601	608	7

The budget request of \$166.3 million and 608 FTE will support the NRC's management and support functions, which are essential to the agency's ability to fulfill its mission. As such, the budget request includes funding for management services, including rental of space and facilities management, security, and human resources. The budget request also includes funding for overseeing the NRC's information resources, performing financial operations, and conducting policy support activities. Of the \$0.5 million net increase, \$1.5 million is for increased salaries and benefits primarily associated with the Governmentwide FY 2004 pay raise. The increase is offset by a decrease of \$1.0 million, resulting from completion of Homeland Security-related activities and anticipated efficiency gains in administrative functions.

## **MANAGEMENT AND SUPPORT**

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### **Measuring Results: Corporate Management Strategies**

The NRC has developed four corporate management strategies (defined below) to help accomplish our strategic and performance goals. These strategies also help the support offices better serve their customers within the agency, thereby helping them to achieve the agency's goals. Our strategic and performance goals focus on the mission or business of the NRC. Our corporate management strategies describe the means by which the NRC will conduct its business to ensure success in implementing the Strategic Plan for FY 2000–FY 2005 and accomplishing the agency's mission.

### **Four Corporate Management Strategies and Their Implementing Strategies**

- (1) To employ innovative and sound business practices, the NRC will employ the following strategies:
  - We will strengthen collaborative processes for conducting business among support offices and between support and program offices.
  - We will improve customer service, balancing internal customer needs with overall agency priorities and available resources.
  - We will find new and better ways of doing business to increase the efficiency and effectiveness of operations.
  - We will create and maintain a Planning, Budgeting, and Performance Management process that is focused on outcomes and provides an effective tool for setting goals, allocating resources, tracking progress, measuring results, and identifying areas for improvement.
  - We will strengthen our financial systems and processes to ensure that our financial assets are adequately protected in a manner that is consistent with risk, and that our financial information is better integrated with agency decisionmaking.
  - We will acquire goods and services in an efficient manner that helps to accomplish our mission, ensures fair and equitable treatment for all parties wishing to do business with the NRC, and results in the best value to the NRC.
  - We will modify our management and organizational structure, as appropriate, to meet the changing demands of internal and external factors, such as the



## **MANAGEMENT AND SUPPORT**

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economic deregulation of the electric utility industry and any resulting consolidation of the nuclear industry.

(2) **To sustain a high-performing, diverse workforce, the NRC will employ the following strategies:**

- We will recruit, hire, and retain a high-quality, diverse workforce with the skills needed to achieve our mission and goals.
- We will assess our scientific, engineering, and technical core competency needs and design a strategic workforce plan to address critical skill gaps and guide the agency in the recruitment, development, and retention of a highly-skilled, diverse workforce. Following the initial assessment of agency technical skills and competencies, and based on lessons learned in the course of that undertaking, we will expand this effort to address core competency requirements in information technology and in management and support areas.
- We will foster a work environment that is free of discrimination and provides opportunities for all employees to optimally use their diverse talents in support of our mission and goals.
- We will base our human resource decisions on sound workforce planning and analysis and develop succession strategies for key positions and critical skills.
- We will improve the capability of our workforce through training, development, and continuous learning.
- We will select and develop strong managers who can provide vision and strategic leadership.
- We will focus on results by linking rewards and recognition to outcomes and organizational effectiveness.

(3) **To provide proactive information management and information technology services, the NRC will employ the following strategies:**

- We will work jointly with program and support offices to align information technology and business planning as a means of achieving agency goals and strategies.

## **MANAGEMENT AND SUPPORT**

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- We will make it more efficient and effective for the staff to acquire, access, and use the information they need to perform their work.
  - We will assume a leadership role in improving the agency staff's capability to use current and planned information technology to enhance performance.
  - We will provide and maintain a robust, reliable, cost-effective, and "user-friendly" information technology infrastructure that is driven by the agency's business needs.
  - We will work jointly with stakeholders to optimize the delivery of information technology and information management services.
  - We will improve the ability of the NRC and external entities to conduct our mutual business electronically.
  - We will enable external stakeholders to easily access desired publicly available information to help them participate in the NRC's regulatory processes, and to enhance understanding of the agency's mission, goals, and performance.
- (4) To communicate strategic change, the NRC will use the following strategies:
- We will review and assess the effectiveness of communication channels and methods within the NRC to ensure that they support the needs of a changing environment.
  - We will examine strategies and develop actions to improve communications within the agency.
  - We will review and assess specific areas where we can improve communication within the agency, including the use of information technology and efficiency of staff meetings.
  - We will build and maintain an environment in which safety, excellence, teamwork, creativity, and innovation among our employees contribute to achieving our strategic goal of enhancing public confidence.
  - We will assess the effectiveness of agency communications by evaluating the various communication channels or methods used to provide information to the public.

## MANAGEMENT AND SUPPORT

- On the basis of the assessments listed above, we will develop and implement communication plans that support strategic change and foster the desired work environment.
- We will improve communication with the public by using strategies that recognize the ongoing changes in the environment external to the agency.
- We will respond to requests and inquiries from stakeholders in a timely, courteous, and professional manner.
- We will identify regulatory decisions or issues that are most likely to generate substantial public interest at an early stage of development and initiate actions to inform and involve the public.

### President's Management Agenda

The NRC's proposed FY 2004 budget supports the Governmentwide initiatives in the President's Management Agenda.

In the area of Strategic Management of Human Capital, the NRC will ensure that staffing strategies meet targeted workforce levels by achieving FTE utilization within 2 percent of the authorized ceiling at the beginning of the fiscal year and maintain an employee/supervisor ratio of greater than 8:1 (Figure 1).

<b>FIGURE 1</b> <i>Output Measure: Staffing strategies achieve targeted workforce levels.</i>						
	<b>FY 1999</b>	<b>FY 2000</b>	<b>FY 2001</b>	<b>FY 2002</b>	<b>FY 2003</b>	<b>FY 2004</b>
<b>Target:</b>	Within 2% of ceiling	Within 2% of ceiling Supervisory ratio 8:1	Within 2% of ceiling Supervisory ratio 8:1	Within 2% of ceiling Supervisory ratio 8:1	Within 2% of ceiling Supervisory ratio 8:1	Within 2% of ceiling Supervisory ratio 8:1
<b>Actual:</b>	Targets met	Targets met	Targets met	Targets met		

The NRC will also strive to sustain a high-performing, diverse workforce by hiring 25 percent of professional staff at the entry level and by retaining 75 percent of new entry-level and other professional hires over their first 3 years of NRC employment (Figure 2).

<b>FIGURE 2</b> <i>Output Measure: Human capital management strategies support achievement of the NRC's corporate management strategies to sustain a high-performing, diverse workforce.</i>			
	<b>FY 2002</b>	<b>FY 2003</b>	<b>FY 2004</b>
<b>Target:</b>	Hire 25% at entry level Retain 75% over 4 years	Hire 25% at entry level Retain 75% over 3 years	Hire 25% at entry level Retain 75% over 3 years
<b>Actual:</b>	Hired 41% at entry level Retained 84% over 3 years		

## MANAGEMENT AND SUPPORT

In addition, the NRC will develop and engage human capital strategies to address high-priority skill gaps within 60 days of identifying the need.

Finally, the NRC will ensure that the diversity of the agency's workforce is comparable to availability in the relevant American labor market and that ethnic and gender minority groups that represent more than 3 percent of the available labor market are no more than 25 percent under-represented in occupations that are critical to the NRC's mission (Figure 3).

The NRC met the 5-percent FY 2002 Governmentwide goal for subjecting commercial FTEs in the Federal Activities Inventory Report to public-private competitions or direct conversions. The agency is currently working to ensure that we meet the 10-percent Governmentwide goal in FY 2003 (Figure 4).

In addition to this initiative, the NRC exceeded its goal to ensure that not less than 20 percent of eligible service contracting dollars for contracts over \$25,000 use performance-based contracting techniques. In FY 2002, the NRC awarded

**FIGURE 3**  
*Output Measure: Diversity of agency workforce groups is equivalent to the relevant American labor market (based on Oak Ridge Institutes of Science and Education availability data).*

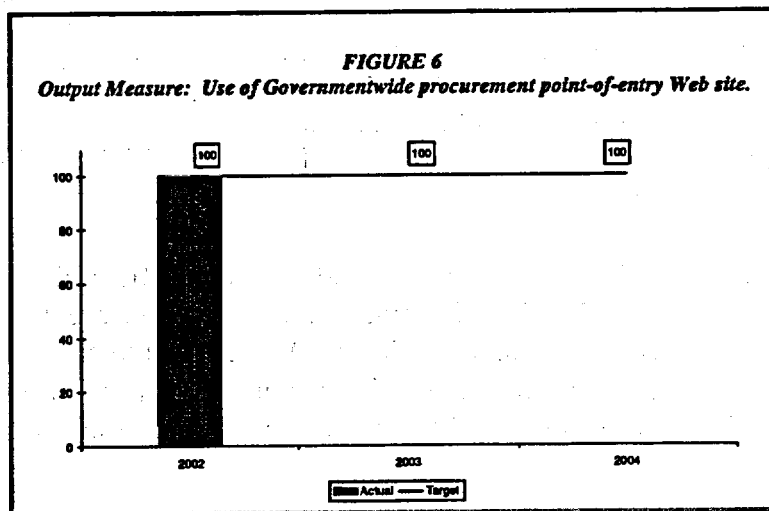
	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Target:	No workforce group < 25% under-represented	No workforce group < 25% under-represented	No workforce group < 25% under-represented	No workforce group < 25% under-represented	No workforce group < 25% under-represented	No workforce group < 25% under-represented
Actual:	Met target	Met target	Met target	Met target		

**FIGURE 4**  
*Output Measure: Competitive sourcing.*

	FY 2002	FY 2003	FY 2004
Target:	≥ 5% FTE	≥ 10%	TBD
Actual:	5%		

**FIGURE 5**  
*Output Measure: Performance-based service contracting.*

	FY 2002	FY 2003	FY 2004
Target:	≥ 20% eligible service dollars	≥ 20% eligible service dollars	≥ 20% eligible service dollars
Actual:	53%		



## MANAGEMENT AND SUPPORT

performance-based service actions for 53 percent of eligible service contracting dollars. The NRC met its goal to post 100 percent of required synopses for acquisition on the Governmentwide procurement point-of-entry Web site, [www.FedBizOpps.gov](http://www.FedBizOpps.gov), in FY 2002. We will strive to maintain that level in FY 2003 and FY 2004 (Figure 5).

In the area of Improved Financial Performance, and in response to the President's Management Agenda, the NRC plans to publish an annual financial statement and receive an unqualified opinion and no material weaknesses (Figure 7). In support of this effort, we will continue to provide quarterly cost accounting reports to agency managers to assist them in analyzing the costs of their programs on a routine basis. In addition, the NRC will utilize an automated, single-input system for employees nationwide to enter time and labor information to support payroll processing, the cost accounting system, and the fee billing system.

To advance Expanded Electronic Government, the NRC will minimize the burden on licensees and the public by ensuring that 40 percent of the agency's external transaction processes can be conducted electronically. In addition, the NRC will provide improved Web-based access to the ADAMS public library, if needed, to ensure that stakeholders are able to access important NRC information (Figure 8). This will further the President's Management Agenda objective of using the Web to inform citizens of the cases before them, allow access to the development of roles, and make more transparent the decisions made at the NRC.

**FIGURE 7**  
**Output Measure: Timeliness and quality of NRC's Annual Financial Statement.**  
**Target: Publish statements and receive an unqualified opinion and no material weakness\***

	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
<b>Target:</b>	Publish FY 98 Statements	Publish FY 99 Statements by 3/00 Receive unqualified opinion	Publish FY 00 Statements by 3/01 Receive unqualified opinion	Publish FY 01 Statements by 2/02 Receive unqualified opinion, no material weaknesses	Publish FY 02 Statements by 2/03 Receive unqualified opinion, no material weaknesses	Publish FY 03 Statements by 2/04 Receive unqualified opinion, no material weaknesses
<b>Actual:</b>	Published 3/99 Unqualified opinion	Published 3/00 Unqualified opinion	Published 3/01 Unqualified opinion	Published 2/02 Unqualified opinion, 2 material weaknesses		

\* Output modified in FY 2002 to add "no material weakness" based on the President's Management Agenda.

**FIGURE 8**  
**Output Measure: Complete the milestones specific to the ADAMS Assessment Action Plan for Challenge Area 5 for improving access to ADAMS.**

**Milestones:**  
FY 2001. Install ADAMS Version 3.3; conduct public outreach programs; complete plan for future releases.  
FY 2002. Complete evaluation of alternative approach to providing Web availability of ADAMS. If evaluation warrants and a decision is made to proceed, implement a prototype of alternative approach.  
FY 2003. Evaluate results of alternative approach and feed into work on ADAMS.  
FY 2004. Provide improved Web-based access to ADAMS public library if needed.

	FY 2001	FY 2002	FY 2003	FY 2004
<b>Target:</b>	Meet milestones	Meet milestones	Meet milestones	Meet milestones
<b>Actual:</b>	Met milestones	Met milestones		

## **MANAGEMENT AND SUPPORT**

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Finally, in the area of Budget and Performance Integration, the NRC will continue (for the fifth consecutive year) to combine the budget and performance plan, reflecting the alignment of resources with anticipated outcomes.

## MANAGEMENT AND SUPPORT

### Budget Authority And Full-time Equivalent Employment by Program

Summary	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Budget Authority by Program (\$K)				
Management Services	56,936	60,653	63,291	2,638
Information Technology and Information Management	52,264	55,620	57,901	2,281
Financial Management	16,425	15,337	15,840	503
Homeland Security	5,370	5,974	0	-5,974
Policy Support	22,681	23,019	23,633	614
Permanent Change of Station	7,336	5,200	5,600	400
Total Budget Authority	161,012	165,803	166,265	462
Full-Time Equivalent Employment by Program				
Management Services	159	160	160	0
Information Technology and Information Management	168	169	173	4
Financial Management	104	104	105	1
Homeland Security	0	0	0	0
Policy Support	169	168	170	2
Permanent Change of Station	0	0	0	0
Total FTE	600	601	608	7

### Justification of Program Requests

The Management and Support arena comprises 6 programs. This section discusses those programs with significant activities or resource changes.

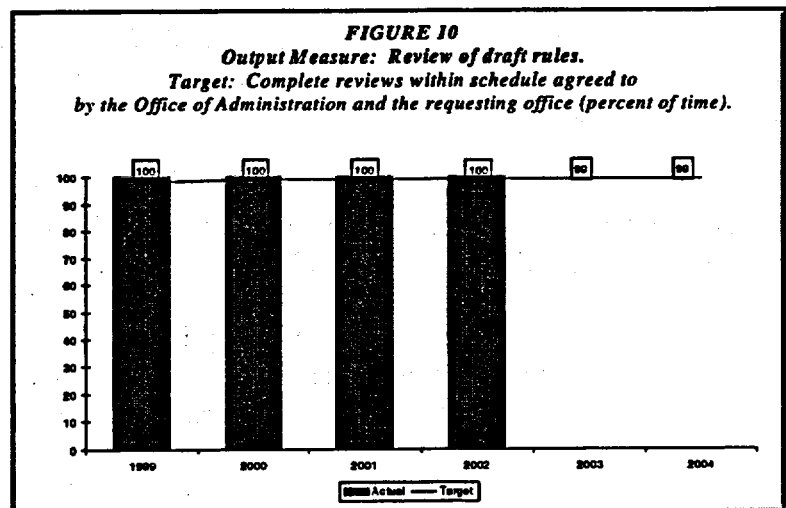
## MANAGEMENT AND SUPPORT

### Management Services

	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Budget Authority by Function (\$K)				
Salaries and Benefits	15,261	16,040	16,424	384
Contract Support and Travel	41,675	44,613	46,867	2,254
Total Budget Authority	56,936	60,653	63,291	2,638
FTE	159	160	160	0

**FY 2004 Activities.** In the Administration area, the NRC will provide for activities involving rental of space and facilities management, physical and personnel security, administrative support services, and acquisition of goods and services. Specifically, the NRC will seek to provide high-quality headquarters and regional facilities management, including rent, operation of delegated buildings, building refurbishment, and alterations to work space by continually receiving a rating of 80 percent or greater in the biennial customer satisfaction report prepared by the General Services Administration (GSA), with regard to building services for the White Flint Complex (Figure 9). The NRC will also

<b>FIGURE 9</b> <i>Output Measure: GSA biennial customer satisfaction report on building services provided by ADM at the White Flint Complex.</i>			
	FY 2002	FY 2003	FY 2004
Target:	Rating of $\geq 80$	N/A	Rating of $\geq 80$
Actual:	93.5%		





## **MANAGEMENT AND SUPPORT**

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ensure a comprehensive security program operation, including physical security, personnel security, and drug testing. In addition, the NRC will provide administrative support services, including transportation services, office provisions, conference facilities, rule reviews, and mail services. Further, the NRC will provide all aspects of contract management necessary to ensure that the agency obtains goods and services in an efficient manner that is consistent with mission needs. In the Human Resources area, the NRC will continue to provide for internal and external training to improve staff skills, recruit and hire new employees to carry out the mission of the agency, and provide efficient and effective products and services, such as Strategic Workforce Planning, to enhance organizational effectiveness. Finally, the NRC will continue to develop, implement, and manage its Civil Rights and Small Business programs.

The "review of draft rules" output measure tracks rules submitted for publication to ensure that they are acceptable for submission to the Office of the Federal Register without substantive changes that would delay publication and affect the promulgation of rules and the associated implementation policies. The NRC sustained a record of 100 percent since FY 1999 (Figure 10). The NRC will also track a new output measure, "NRC office director satisfaction," beginning in FY 2003. This measure will assess the satisfaction of the cognizant office director(s) with administrative service performance for facilities, security, procurement, and administrative support.

The NRC will use another new output measure, "efficiency implementation," to ascertain that the agency implements efficiencies that are identified within management and support functions and approved by management.

Using another new measure, "effectiveness and efficiency assessments," the NRC will assess the number of effectiveness and efficiency assessments that are conducted and presented to senior agency management.

In addition, another new output measure, "achievement of negotiated performance standards," will enable the NRC to monitor the percent of negotiated performance standards contained in the Office of Administration's annual operating plan that are accomplished that year.

*Change from FY 2003.* Resources increase primarily because of the anticipated rent increases for headquarters and the regions, as well as maintenance of coverage by and an anticipated wage increase for security guards. Salaries and benefits also increase to support the Governmentwide FY 2004 pay raise.

## **MANAGEMENT AND SUPPORT**

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

	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Budget Authority by Function (\$K)				
Salaries and Benefits	16,701	17,383	18,258	875
Contract Support and Travel	35,563	38,237	39,643	1,406
Total Budget Authority	52,264	55,620	57,901	2,281
FTE	168	169	173	4

**FY 2004 Activities.** The NRC will plan, direct, and oversee the agency's information resources, including information technology (IT) infrastructure, applications systems, and delivery of information management (IM) services. Specifically, the NRC will plan and assess the evolution of the agency's IT environment and strengthen its IT security program in order to resolve deficiencies identified in the annual Government Information Security Reform Act (GISRA) report.

The NRC will also continue to strengthen its Enterprise Architecture (EA) program, consistent with OMB guidance. Toward that end, the NRC has adopted the OMB-approved Federal Enterprise Architecture Framework (FEAF) and will use this framework to create the necessary EA products that capture the agency's business, data, applications, and technology.

The NRC will also continue to strengthen its Capital Planning and Investment Control (CPIC) process, building on a major revision of the process, which the agency put in place in 1997. The revised process will reflect new OMB guidance as well as lessons learned from experiences at the NRC. The NRC's CPIC process will continue to ensure that both proposed IT investments and ongoing IT activities are evaluated as to alternatives (including E-Government approaches), costs, risks, benefits, and overall value to the agency's mission.

In addition, in FY 2004, the NRC will ensure that 100 percent of new employees, 50 percent of existing employees, and 75 percent of employees with direct IT responsibility will receive IT security training appropriate to their individual interaction with and responsibility for IT systems. The NRC will also increase the average security level for all of the agency's major

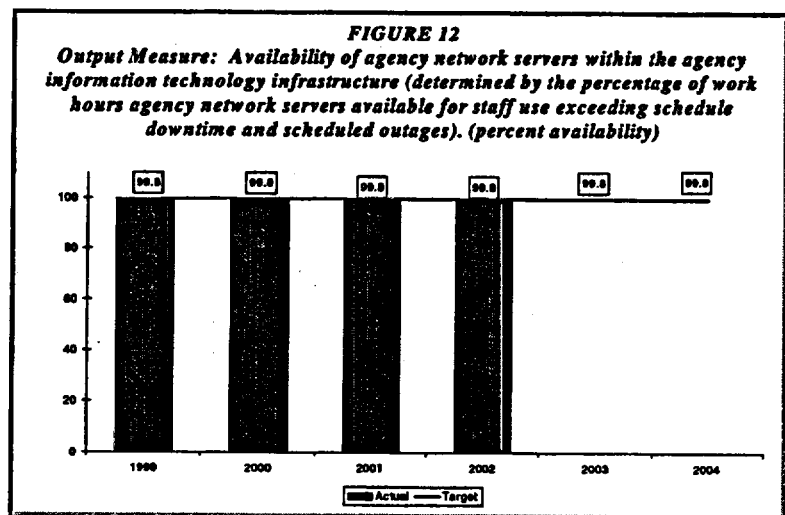
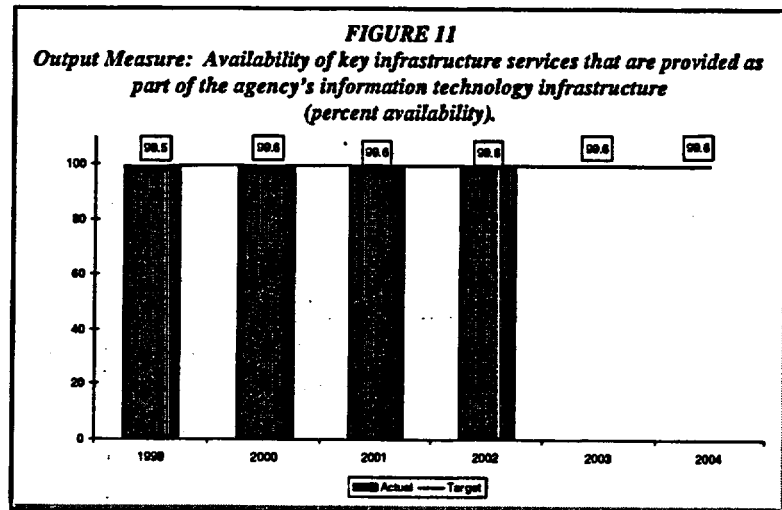
## MANAGEMENT AND SUPPORT

applications and general support systems to achieve an average National Institute of Standards and Technology (NIST) level of 4.0 and a minimum level of 3.0.

The NRC will also support the agency's demand for new technology assessments by identifying and assessing opportunities where technology can make the agency's activities more efficient and effective, in areas such as Web technology, wireless communications, software development tools and standards, and evolving Internet and communications standards. The NRC will also provide high-quality seat management services, including equipment, support and services for desktops, network printers, servers, and the network infrastructure. In addition, in FY 2004, the NRC will ensure that key infrastructure services that are provided as part of the agency's IT infrastructure are available 99.6 percent of the time (Figure 11).

The NRC will also ensure that network servers within the agency's IT infrastructure are available 99.8 percent of the time. In addition, user problems and requests associated with desktop, printers, servers, and communication equipment will be answered, responded to, and resolved within the stated contract performance requirements 96 percent of the time (Figure 12).

The NRC will also provide ongoing network development, implementation, administration, and technical services to meet the agency's day-to-day and strategic business needs. In addition, the NRC will provide



## **MANAGEMENT AND SUPPORT**

telecommunications services and operations support (including agency long distance and local telecommunications services) and applications development support (including contracts management and IT project management services). The NRC will continue to support Governmentwide E-Government initiatives, including E-Rulemaking, E-Authentication, E-Hiring, and E-Records. Finally, the NRC will provide information, publishing, and records management services, including ADAMS (the automated system used by the NRC staff to electronically create, store, retrieve, disseminate, and retire the agency's official records). In addition, the NRC will ensure an average level of customer satisfaction with the public Web site of at least 3 on a scale of 1 to 4.

With a new output measure, to begin in FY 2003, the NRC will also measure compliance with the agency's Automated Information System program. Program compliance includes meeting requirements of a system security and contingency plan, as well as certification and accreditation requirements.

Beginning in FY 2003, the agency will use another new output measure to assess the timeliness of infrastructure services and support contract services.

The NRC has also established a Freedom of Information Act (FOIA) measure for use beginning in FY 2003, to ascertain the satisfaction of FOIA requesters. This measure is based on timeliness of the agency's responses to FOIA requests.

The agency met its timeliness target for response to network security vulnerabilities in FY 2002. The NRC will continue to apply the current target of 24-hour response time (Figure 13).

Another output measure related to email and Web access infrastructure services will enable the NRC to evaluate the agency's effectiveness in restoring email and Web access on a timely basis. No security incidents were reported in FY 2002. After further analysis, the output measure was revised in FY 2003 to reflect the realization that it was impractical and cost

<b>FIGURE 13</b> <i>Output Measure: Network security (respond to any new network security vulnerability upon discovery).</i>			
	<b>FY 2002</b>	<b>FY 2003</b>	<b>FY 2004</b>
<b>Target:</b>	Respond within 24 hours	Respond within 24 hours	Respond within 24 hours
<b>Actual:</b>	Target met (216 security reports)		

<b>FIGURE 14</b> <i>Output Measure: Security and availability of critical email and Web access infrastructure services (restore email and Web access to operational status upon discovery of a security incident).</i>			
	<b>FY 2002</b>	<b>FY 2003</b>	<b>FY 2004</b>
<b>Target:</b>	Restore access < 1 hour 99.9% of time	Restore access < 4 hours 99.9% of time	Restore access < 4 hours 99.9% of time
<b>Actual:</b>	No security incidents reported		

## MANAGEMENT AND SUPPORT

prohibitive to install and implement the parallel system that would be needed to achieve a 1-hour response time (Figure 14).

Beginning in FY 2003, the NRC will also use another new output measure to monitor security, availability, and integrity of the agency's major applications and general support systems. This measure is based upon system integrity, as measured by the occurrence of interruptions to business functions.

NRC will conduct its second biennial survey of staff satisfaction with information in the agency's primary applications systems in FY 2003 (Figure 15).

<b>FIGURE 15</b> <i>Output Measure: Level of staff satisfaction with information in NRC's primary application systems (on a scale of 1 to 5).</i>						
	<b>FY 1999</b>	<b>FY 2000</b>	<b>FY 2001</b>	<b>FY 2002</b>	<b>FY 2003</b>	<b>FY 2004</b>
<b>Target:</b>	No survey performed	No target, changed to biennial	3.8	Biennial measure	3.8	Biennial measure
<b>Actual:</b>	N/A	N/A	3.7	N/A		N/A

The business cases for major system investments define the bases by which the NRC defines their effectiveness, efficiency, and realism.

Beginning in FY 2003, the NRC has established a target of one key process improvement per year. These annual improvements are directed at improving management and supporting efficiency, effectiveness, and realism.

Additional new output measures for tracking management and support activities include timeliness of responses to information correction requests, and IT productivity improvements in business processes through technical assessments. The timeliness of responsiveness to information correction requests will be implemented in FY 2003 at 70 percent of the response level established in the NRC's Final Information Quality Guidelines. That target increases to 80 percent in FY 2004. By contrast, the NRC has established an FY 2004 target of 50 percent for demonstrating productivity improvements in business processes for new IT technologies.

**Change from FY 2003.** Resources increase because of contract escalation clauses, an upgrade to the Windows Operating System, a regional seat management services pilot, and strategic investments to respond to stakeholder feedback to enhance IT/IM leadership and oversight. Salaries and benefits also increase to support the Governmentwide FY 2004 pay raise and the FTE required for strategic investments.

## MANAGEMENT AND SUPPORT

### *Financial Management*

	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Budget Authority by Function (\$K)				
Salaries and Benefits	9,962	10,284	10,637	353
Contract Support and Travel	6,463	5,053	5,203	150
Total Budget Authority	16,425	15,337	15,840	503
FTE	104	104	105	1

**FY 2004 Activities.** The NRC will continue to perform all of the planning, budgeting, analysis, accounting, and finance operations of the agency's Financial Management program. In the area of Planning, Budget, and Analysis, the NRC will provide agency senior management with analyses of policy, program, and resource issues; centrally manage the strategic planning, budget formulation, and resource management processes; and develop and maintain policies, procedures, and operations to formulate and implement the approved NRC budget. The NRC will also continue to develop and administer the agency's authorization and appropriation legislation; design and develop systems and criteria for resource

**FIGURE 16**

*Output Measure: Submit and publish the triennial Strategic Plan to Congress and OMB on time.*

	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
<b>Target:</b>	Not required until FY 00	Submit and publish FY 00 - FY 05 Strategic Plan 9/29/00*	Not required until FY 03	Not required until FY 03	Submit and publish FY 03 - FY 08 Strategic Plan 9/29/03*	Not required until FY 06
<b>Actual:</b>	N/A	Met target	N/A	N/A		

\* Submit an advanced copy to OMB 45 days before transmitting to Congress.

**FIGURE 17**

*Output Measure: Submit and publish the Budget Estimates and Performance Plan and Program Performance Report annually to OMB, Congress, and the President on time.*

	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
<b>Target:</b>	Submit FY 00 Budget Estimates and Performance Plan on time	Submit FY 01 Budget Estimates and Performance Plan on time Submit FY 99 Performance Report on time	Submit FY 02 Budget Estimates and Performance Plan on time Submit FY 00 Performance Report 3/31/01	Submit FY 03 Budget Estimates and Performance Plan (Congress) 2/4/02 and FY 04 Budget Estimates and Performance Plan (OMB) 9/5/02 Submit FY 01 Performance Report 2/27/02	Submit FY 04 Budget Estimates and Performance Plan (Congress) 2/3/03 and FY 05 Budget Estimates and Performance Plan (OMB) 9/5/03 Submit FY 02 Performance Report 1/31/03	Submit FY 05 Budget Estimates and Performance Plan (Congress) 2/2/04 and FY 06 Budget Estimates and Performance Plan (OMB) 9/13/04 Submit FY 03 Performance Report 2/1/04
<b>Actual:</b>	Met target Performance Report not required	Met target	Met target	Met target For FY 03 Budget Estimates and Performance Plan (Congress) and FY 01 Performance Report*		

\* FY 03 Budget Estimates and Performance Plan (OMB) target met 3 days late with OMB acknowledgement.

## MANAGEMENT AND SUPPORT

planning and control; oversee the agency's administrative control of funds; and maintain liaison with OMB and Congressional committees. In addition, in FY 2004, the NRC will submit and publish the triennial Strategic Plan to Congress by September 2003 (Figure 16), and the Budget Estimates and Performance Plan to OMB, Congress, and the President on time (Figure 17).

In the Accounting and Finance area, the NRC will support financial activities, including developing and maintaining an integrated, agencywide accounting and financial management system; establishing policy and directing oversight of the agency's financial management personnel, activities, and operations; preparing and transmitting an annual report that includes the agency's audited financial statement; monitoring the financial execution of the agency's budget in relation to actual expenditures; controlling the use of agency funds to ensure that they are expended in accordance with applicable laws and standards; preparing and submitting to the Chairman timely cost and performance reports; and reviewing, on a periodic basis, fees and

recommendations for revising those charges as appropriate. Specifically, the NRC will ensure the timeliness and quality of its FY 2003 Financial Statement, ensuring that it is published by February 2004 and receives an unqualified opinion. In addition, the NRC will ensure that amounts due to the agency are collected and will maintain past due accounts receivable at 1 percent or less of annual billings for the fiscal year (Figure 18). In addition, the NRC will issue the proposed Fee Rule by late-March and the final rule by mid-June 2004 (Figure 19).

<b>FIGURE 18</b> <b>Output Measure: Collect amounts due to the NRC.</b> <b>Target: Percent of actual collections compared with projected collections.</b> <b>Maintain past due accounts receivable as a percent of annual billings for the fiscal year.</b>						
	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Target:	98% collections Past due ≤ \$5M	100% collections Past due ≤ \$5M	100% collections Past due ≤ 1% of billings	100% collections Past due ≤ 1% of billings	100% collections Past due ≤ 1% of billings	100% collections Past due ≤ 1% of billings
Actual:	98.6% collections Past due \$2.7M	100.7% collections Past due \$2M	100.4% collections Past due 0.5%	99.4% collections Past due .004%		

<b>FIGURE 19</b> <b>Output Measure: Fee Rule (publish proposed and final rules).</b>						
	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Target:	Proposed Rule 3/99 Final Rule 6/99	Proposed Rule 3/00 Final Rule 6/00	Proposed Rule mid-March Final Rule mid-June	Proposed Rule late-March Final Rule mid-June	Proposed Rule late-March Final Rule mid-June	Proposed Rule late-March Final Rule mid-June
Actual:	Met target	Met target	Met target	Met target		

<b>FIGURE 20</b> <b>Output Measure: Pay bills (percent of bills paid by EFT and percent payments on time).</b>						
	FY 1999	FY 2000	FY 2001	FY 2002	FY 2003	FY 2004
Target:	98% by EFT 94% on time	98% by EFT 94% on time	98% by EFT 94% on time	100% by EFT 95% on time	100% by EFT 95% on time	100% by EFT 95% on time
Actual:	98% by EFT 96% on time	99% by EFT 96% on time	100% by EFT 95% on time	100% by EFT 87% on time*		
<small>* 95% target was not met for FY 2002 as a result of delays in receipt of invoices caused by the mail irradiation process and loss of contractor support. These conditions have been resolved for FY 2003.</small>						

## **MANAGEMENT AND SUPPORT**

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Further, the NRC will pay approximately 100 percent of its bills by electronic funds transfer (EFT) and will pay 95 percent of its bills on time (Figure 20).

*Change from FY 2003.* Resources increase because of costs associated with operations, maintenance, and support of the agency Human Resources Management System. Salaries and benefits also increase to support the Governmentwide FY 2004 pay raise and the additional FTE required to support the accelerated schedule for producing the agency's audited financial statements.



## MANAGEMENT AND SUPPORT

### Policy Support

	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Budget Authority by Function (\$K)				
Salaries and Benefits	20,924	21,066	21,835	769
Contract Support and Travel	1,757	1,953	1,798	-155
Total Budget Authority	22,681	23,019	23,633	614
FTE	169	168	170	2

**FY 2004 Activities.** Policy support activities are conducted by the offices of the Commission, Commission Appellate Adjudication, Congressional Affairs, General Counsel, Public Affairs, Secretariat, and Executive Director for Operations, as well as the Advisory Committee for Reactor Safeguards. As the governing body of the NRC, the Commission is responsible for determining fundamental policy and for guiding staff offices to ensure that the civilian use of nuclear energy is regulated in a manner that is consistent with public health and safety, environmental quality, national security, and antitrust laws. Other Commission-level office support activities include analysis of long-term policy issues, administrative proceedings review and advice, liaison with outside constituents and other Government agencies, legal advice for the Commission, and all executive management services for the Commission.

**Change from FY 2003.** Resources increase as a result of salary and benefit increases associated with the Governmentwide FY 2004 pay raise and the additional FTE required to provide additional operational support to the Commission and to expand the review time for each member of the Advisory Committee for Reactor Safeguards.

## **INSPECTOR GENERAL**

## OFFICE OF THE INSPECTOR GENERAL

*Congress passed the Inspector General (IG) Act in 1978 to ensure integrity and efficiency within the Federal Government and its programs. The NRC's Office of the Inspector General (OIG) was subsequently established as a statutory entity by the 1988 amendment to the Act on April 15, 1989.*

*The OIG's mission is to (1) independently and objectively conduct and supervise audits and investigations related to the NRC's programs and operations; (2) prevent and detect fraud, waste, and abuse; and (3) promote economy, efficiency, and effectiveness in the NRC's programs and operations. In addition, OIG reviews existing and proposed regulations, legislation, and directives and provides comments, as appropriate, regarding any identified significant concern. 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 action, and monitors the NRC's progress in carrying out such actions.*

To accomplish this mission, OIG established the following four strategic goals:

- To add value to the NRC's technical and administrative programs, OIG will identify opportunities for improvement in the agency and conduct activities for the purpose of preventing and detecting fraud, waste, and abuse in the NRC's programs and operations.
- To keep our stakeholders well-informed, OIG will enhance its communication and liaison activities with its customers, including NRC management, the U.S. Congress, Government agencies, the nuclear industry, and public entities.
- OIG will make value-added policy, legislative, and regulatory recommendations related to the NRC's programs and operations.
- OIG will improve the effectiveness of its efforts in conducting activities for the purpose of preventing and detecting fraud, waste, and abuse in the NRC's programs and operations by ensuring the economical, efficient, and effective operation of our office.

The FY 2004 budget and performance plan supports the implementation of OIG's Strategic Plan, as well as its goals and objectives. This budget request also addresses new challenges related to the terrorist attacks on September 11, 2001, and the emerging security and safeguards issues involved with nuclear materials and the NRC programs that govern them.

## **INSPECTOR GENERAL**

### **Budget Overview**

Summary	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Budget Authority by Function (\$K)				
Salaries and Benefits	5,300	5,500	5,975	475
Contract Support and Travel	880	1,300	1,325	25
Total Budget Authority	6,180	6,800	7,300	500
FTE	44	44	47	3

OIG is requesting an FY 2004 budget of \$7.3 million and 47 FTE. This request reflects a total increase of \$0.5 million over last year's budget. Of this amount, \$0.3 million will support the addition of 3 FTE to our technical audit staff, which includes salaries and benefits, travel, training, information technology, and training funds. With this increased funding, OIG will bolster its oversight of the NRC's key safety-related programs. The audit section of this request discusses OIG's audit work in detail. The remaining increase of \$0.2 million represents increased personnel costs in salaries and benefits to sustain existing staff.

These resources will enable the OIG to accomplish its FY 2004 strategic goals, thereby assisting the NRC in protecting public health and safety, as well as 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.

## INSPECTOR GENERAL

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### Selected FY 2002 Accomplishments

In FY 2002, OIG accomplished its strategic goals and objectives. The following sections discuss representative examples of the work performed in FY 2002 by the OIG audit and investigative programs.

#### Audits

In FY 2002, OIG issued 17 audits of NRC programs and operations that either evaluate high-risk agency programs or comply with mandatory financial and computer security-related legislation, as illustrated by the following examples of recent work:

- The *Independent Auditor's Report and Principal Statements for the Year Ended September 30, 2001*, provided an unqualified opinion on the NRC's FY 2001 financial statements. However, the auditors identified material weaknesses associated with the lack of managerial cost accounting and inadequate accounting for internal use software. The NRC's Chief Financial Officer and Executive Director for Operations disagreed that these are material weaknesses. Nonetheless, the OIG will report these issues as material weaknesses until the agency implements corrective actions.
- The *Audit of the Use of the Internet at NRC*, which focused on whether agency employees use is appropriate and policy-compliant manner, revealed that, based on Internet activity over an 8-day period in June 2001, at least 52 percent and as much as 79 percent of employees' Internet activity was for personal use. Moreover, personal use, such as looking at sexually explicit Web sites, was in direct violation of NRC policy. Consequently, the OIG recommended that the NRC clarify and enforce its May 2001 policy covering personal Internet usage.
- The *Audit of NRC's Accountability and Control of Software* disclosed that the agency is not in compliance with Executive Order (E.O.) 13103, "Computer Software Piracy". The NRC's policies (management directives) and procedures (management controls) do not address the full scope of requirements defined in E.O. 13103 because the agency focused its actions on *personal use*, rather than *all uses*, of software and the agency planned to change the business approach for its information technology resources. As a result, the NRC has not conducted an initial assessment of its software, established a baseline for its software inventory, or determined whether all software on agency computers is authorized. The lack of adequate policies and procedures leaves the NRC, its employees, and its contractors vulnerable to the consequences of unauthorized software use, which may include fines and imprisonment.
- The *Audit of the Materials Licensee Fees* reported a significant decrease in the number of materials licensees regulated by the NRC from more than 9,000 to about 5,000 as a result of

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the NRC overseeing 32 Agreement States. The agency is required to recover a substantial portion of its budget from direct and annual fees to licensees, as required by the Omnibus Budget Reconciliation Act of 1990. The NRC has made some adjustments in full-time equivalent staffing to reflect the continuing loss of materials licensees. However, the NRC has not adequately addressed its non-direct cost components, including program overhead, management and support costs, and surcharge costs, which comprise approximately 60 percent of the materials fees. Without significant reductions in both direct and non-direct costs, the agency will not be able to stabilize or reduce materials fees.

- The *Review of Security at NRC Headquarters* revealed that the NRC increased its protection of Headquarters buildings against unauthorized access in response to security reviews in 1995 and 1999. In addition, following the terrorist attacks on September 11, 2001, the NRC further tightened its Headquarters security and identified a remaining vulnerability. The agency is currently working with the General Services Administration regarding a solution for this vulnerability. OIG auditors found that the NRC has increasingly hardened its controls to protect against unauthorized access to its headquarters complex, but still needs to do more.
- The *Review of NRC's Significance Determination Process (SDP)* showed that the SDP still needs significant refinements. Specifically, the NRC needs to (1) develop an action plan to correct Phase 2 analysis weaknesses or eliminate this portion of the SDP, because Phase 2 provides conservative results that have been subsequently changed, is used infrequently, and adds cost and time to the process; (2) discontinue the expenditure of about \$1,050,000 remaining to develop Phase 2 until the action plan is completed; (3) provide guidance related to issuing information from licensee risk assessments in SDP evaluations; (4) take action to improve SDP timeliness; (5) improve its Web site to more fully inform the public; and (6) improve SDP training and guidance.

### **Investigations**

In FY 2002, the OIG completed 58 investigations and event inquiries, focusing on violations of law or misconduct by NRC employees and contractors and allegations of irregularities or abuses in NRC programs and operations, as illustrated by the following examples of recent work:

- OIG conducted investigations concerning five NRC employees who misused their Government computers to access pornographic Internet sites. These investigations revealed that the five NRC employees used their assigned NRC computers to access Internet sites containing sexually explicit material. Moreover, OIG found that the employees' visits to these pornographic sites involved up to 35 sessions and included downloading several thousand files of sexually explicit graphic images. Consequently, one employee received

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a 45-calendar-day suspension without pay, two employees received 30-calendar-day suspensions without pay, and the two remaining employees retired from Government service.

- OIG conducted an investigation concerning an allegation that U.S. Department of Energy (DOE) personnel or contractors had improperly obtained a predecisional draft copy of the NRC's Yucca Mountain Review Plan (YMRP). The NRC originally planned to release the draft at a meeting of the NRC's Advisory Committee for Nuclear Waste (ACNW) on September 19, 2000. The OIG determined that 1-week before the scheduled release of the YMRP in September 2000, an NRC official at Yucca Mountain allowed a DOE nuclear engineer to review the YMRP in the NRC office. Without the knowledge of the NRC employee, the DOE engineer photocopied the draft plan and gave it to a DOE contract employee. The DOE engineer recommended that the contract employee duplicate, distribute, and review the draft so that DOE would be prepared to discuss its content at the forthcoming ACNW meeting. However, the NRC did not present the YMRP at the ACNW meeting and did not otherwise officially released the draft to the public because of direction by the Commission. NRC management has since taken corrective steps to protect against future unauthorized releases of sensitive NRC documents.
- OIG conducted an investigation concerning possible bid rigging on a contract for the Moab Mill Reclamation Trust. In that instance, the NRC hired a contractor to continue the reclamation of the mill tailings pile after the initial contractor with an NRC source license declared bankruptcy. The new contractor sent out a solicitation for a subcontractor to dewater the mill tailings pile (also known as wick drain technology). OIG subsequently received information that the solicitation called for a subcontractor to conduct a small test pilot project to dewater 750,000 square feet of the mill tailings pile with the intent to rebid for the full project. However, the subcontractor that won the initial solicitation immediately completed dewatering the entire pile of about 13-million square feet thereby precluding submission of any additional bids. OIG's investigation revealed that the winning subcontractor (the lowest bidder for the test pilot project) was awarded the job of dewatering the entire pile without the primary contractor resoliciting the full project. The subcontractor dewatered the entire pile at a price well below its winning bid for the test pilot project and within industry standards.
- OIG conducted an investigation into high-level pager use by an NRC employee which did not appear to be associated with official business. OIG's investigation revealed that the employee used his Government-issued two-way pager extensively for prohibited personal communications that resulted in excess charges to the NRC of more than \$43,000. OIG also found that 75 percent of the employee's NRC-assigned telephone calls were personal. Additionally, the employee used his Government travel credit card for personal purchases and misused his NRC computer to view and save images from sexually explicit Web sites. Action by the agency is pending.

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- **OIG investigative staff undertook several proactive initiatives to improve NRC employees' awareness of potential contractor fraud. Toward that end, OIG presented fraud awareness information sessions to headquarters and regional project officers and employees, and developed and issued a fraud awareness bulletin that provided NRC employees with case examples of various fraudulent activities from across the OIG community.**

**In addition to the traditional program work performed by the investigative staff, OIG provided law enforcement support to the NRC and the Federal Bureau of Investigation (FBI) in the aftermath of the terrorist attacks on September 11.**

- **OIG special agents participated in a multi-agency task force charged to investigate the terrorist attacks on the World Trade Center and the Pentagon on September 11, 2001. As members of the Joint Terrorism Task Force in New York City, OIG special agents teamed with FBI agents to conduct comprehensive interviews of 12 targeted subjects arriving at John F. Kennedy International Airport from Saudi Arabia. The task force also initiated several investigations that included searches (either consensual or by warrant), subpoenas, and the gathering of information from a multitude of sources. In addition, an OIG special agent directed an investigation that led to the arrests of four illegal immigrants.**
- **As part of the NRC's response to the terrorist attacks, OIG detailed several special agents to the NRC Threat Assessment Team as intelligence analysts providing real-time intelligence assessments of the threat environment for licensed nuclear facilities.**

**The agency is taking corrective action to address and to implement OIG findings and recommendations identified in the audits and investigations performed in FY 2002.**



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### Budget Authority and Full-Time Equivalent Employment by Program

Summary	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Budget Authority by Program (\$K)				
Audits	2,592	3,111	3,476	365
Investigations	2,371	2,453	2,559	106
Management and Operational Support	1,217	1,236	1,265	29
Total Budget Authority	6,180	6,800	7,300	500
Full-Time Equivalent Employment by Program				
Audits	18	18	21	3
Investigations	18	18	18	0
Management and Operational Support	8	8	8	0
Total	44	44	47	3

### Justification of Program Requests

The work performed by the OIG is divided among 3 program areas, including Audits, Investigations, and Management and Operational Support. This section presents resource tables and program descriptions detailing the requested resources and the associated efforts within the respective programs.

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### **Audits**

Summary	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Budget Authority by Function (\$K)				
Salaries and Benefits	2,168	2,250	2,599	349
Contract Support and Travel	424 <sup>1</sup>	861	877	16
Total Budget Authority	2,592	3,111	3,476	365
FTE	18	18	21	3

For FY 2004, OIG requests \$3.5 million and 21 FTE to carry out its audit program activities. This funding will sustain the existing program and add an additional 3 FTE to the audit staff. These additional resources will enhance OIG's capability to focus on NRC programs related to the handling and disposal of nuclear waste, nuclear fuel fabrication, and nuclear material control and accountability issues. The requested resources will also enable the OIG to provide better oversight of the NRC's safety-related programs and emerging responsibility at certain DOE laboratories, as well as the role of NRC's Enforcement Program. The 3 new FTE will also enable OIG to conduct an increased number of audits (18 to 21 for FY 2004). The budget request will also enable OIG to acquire the requisite expertise to acquire and oversee the annual audit of the NRC's financial statements and to assist in conducting information security and contract audits. In addition, the expanded audit capability will enable OIG to assist the agency in the early identification of problems, thereby giving the NRC an opportunity to address the problems at an early stage.

In assessing the basis for the requested OIG budget, it is important to note that three-fourths of the NRC's resources are dedicated to program activities related to nuclear reactors, materials, and waste, while only one-third of OIG auditors work in those program areas. Because of the mandatory nature of audit work in the financial and information management area, OIG cannot divert its auditors into nuclear program activities. To accommodate that disparity, the additional resources will result in a more balanced audit program that is better aligned with NRC activities and current events.

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### ***FY 2004 Audit Performance Goals.***

The OIG audits planned for FY 2004 will be based on a comprehensive annual audit plan, which includes input from various elements of the NRC, Congress, other Federal agencies, the nuclear industry, and the OIG staff. OIG will design the planned audits to encourage efficiency, economy, and effectiveness in NRC programs and operations; detect and prevent fraud, waste, and mismanagement; 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 achieve the following three established performance goals:

- (1) To conduct timely, effective, and independent audits, the OIG will employ the following performance measures:**
  - Complete audits in an average of 6 months or less.
  - Obtain agency agreement on at least 90 percent of audit recommendations.
  - Obtain final agency action on 65 percent of audit recommendations within 1 year.
- (2) To proactively identify and act on current and emerging issues, the OIG will employ the following performance measure:**
  - Develop a detailed annual audit plan, listing audits to be performed and estimated required resources, with input from agency management, Congress, industry, other Government agencies, and the public.
- (3) To advise the NRC in areas of OIG expertise, the OIG will employ the following performance measures:**
  - Participate in one or more targeted management projects or task forces.
  - Complete audit reports that either define agency institutional weaknesses or provide assessments as to how well NRC programs are meeting intended objectives and or purposes.

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### **Investigations**

Summary	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Budget Authority by Function (\$K)				
Salaries and Benefits	2,168	2,250	2,356	106
Contract Support and Travel	203	203	203	0
Total Budget Authority	2,371	2,453	2,559	106
FTE	18	18	18	0

For FY 2004, OIG requests \$2.6 million and 18 FTE to carry out its investigative program activities. With these resources, OIG will conduct 50-70 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 the OIG and the NRC's regional employees. 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 regarding the vulnerabilities associated with computer intrusion involving unauthorized access into the agency's operating systems.

OIG may also conduct proactive investigations when indications are raised concerning potentially systematic violations, such as theft of Government property or contract fraud. In addition, OIG will periodically undertake event inquiries that focus on a root cause analysis of institutional weaknesses associated with a particular event.

#### ***FY 2004 Investigative Performance Goals.***

The OIG investigative program for FY 2004 will include investigative activities related to the integrity of the NRC's programs and operations. The 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 areas bearing a high potential for fraud, waste, and abuse.

The requested resources for the Investigative Program will support OIG efforts to achieve the following four established performance goals:

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- (1) **To conduct timely, effective, and independent investigations, the OIG will employ the following performance measures:**
- Complete 80 percent of all non-fraud-related investigations including event inquiries, by the established due date.
  - Complete 90 percent of active cases in less than 2 years.
  - Refer 30 percent of investigations for criminal prosecution.
  - Achieve a minimum success rate of 90 percent for actions taken by NRC management in response to investigative reports issued by OIG.
  - Achieve a minimum success rate of 70 percent for Program Fraud and Civil Remedies Act (PCFRA) cases.
- (2) **To proactively identify and act on current and emerging issues, the OIG will employ the following performance measure:**
- Develop a detailed annual investigative plan based, in part, on sources of information developed by the OIG investigative staff, including members of public interest groups, NRC employees, representatives of other agencies, and licensees.
- (3) **To advise the NRC in areas of OIG expertise, the OIG will employ the following performance measures:**
- Participate in one or more targeted management projects or task forces.
  - Complete event inquiries that either define agency institutional weaknesses or provide assessments as to how well NRC programs are meeting intended objectives and/or purposes.
- (4) **To enhance programs for prevention and awareness of fraud, waste, and abuse, the OIG will employ the following performance measure:**
- Complete annual training for NRC employees, and others, in areas that are most at risk for fraud, waste, and abuse.

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### **Management and Operational Support**

Summary	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Budget Authority by Function (\$K)				
Salaries and Benefits	964	1,000	1,020	20
Contract Support and Travel	253	236	245	9
Total Budget Authority	1,217	1,236	1,265	29
FTE	8	8	8	0

For FY 2004, OIG requests \$1.3 million and 8 FTE to carry out its management and operational support activities. The Inspector's General management and operational support staff consist of senior executive managers, general counsel, and administrative support staff.

The requested management and operational support budget will provide the resources for OIG senior management to provide 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 objectives 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 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 preparation and coordination of the OIG's Semiannual Report to Congress.

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### ***FY 2004 Management and Operational Support Goals.***

The requested resources will support OIG efforts to achieve the following two established performance goals:

- (1) To review existing and proposed legislation and regulations, the OIG will employ the following performance measures:**
  - The NRC will take responsive action on 60 percent of OIG comments related to the review of proposed policy, legislation, and regulations.
  - The OIG will respond within the due date(s) to 90 percent of the agency's requests for comment and/or input on existing and proposed legislation and regulations.
- (2) To maximize organizational efficiency and effectiveness, the OIG will employ the following performance measure:**
  - OIG will evaluate the way it processes information to identify any potential inefficiencies.

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### **Linkage Between the General Goals of the OIG's Strategic Plan for FY 2000 - FY 2005 and the OIG's Performance Plan for FY 2003 - FY 2004**

The OIG's strategic plan includes four general goals and a number of supporting objectives that describe planned accomplishments.

The following is a linkage between the general goals of the OIG FY 2000–FY 2005 Strategic Plan and the FY 2003–FY 2004 Performance Plan. This includes a tie-in between the level of activity by the OIG in its audit, investigation, and support functions with the objectives related to the general goals. It also includes the performance indicators, FY 2003/FY 2004 target levels for accomplishing our performance indicators, and our FY 1999–FY 2002 performance results. The OIG will revise its strategic plan and associated performance goals and measures in FY 2003 to better align resources with performance goals.

<b><u>General Goal 1</u></b>				
<b>To add value to the NRC's technical and administrative programs, OIG will identify opportunities for improvement in the agency and conduct activities for the purpose of preventing and detecting fraud, waste, and abuse in the NRC's programs and operations.</b>				
<b><u>Objectives</u></b>				
1. Conduct timely, effective, and independent audits and investigations.				
2. Proactively identify and act on current and emerging issues.				
3. Advise the NRC in areas of OIG expertise.				
4. Enhance programs for prevention and awareness of fraud, waste, and abuse.				
<b><u>FY 2004 Activities</u></b>	<b>Objectives</b>			
	1	2	3	4
OIG will conduct 18 to 21 audits during FY 2004. The audits planned for this period will be based on input from various elements of NRC, Congress, other Federal agencies, the nuclear industry, and OIG staff. The planned audits will encourage efficiency, economy, and effectiveness of NRC programs and operations; detect and prevent fraud, waste, and mismanagement; improve program activities at headquarters and regional locations; and respond to unplanned priority requests and emerging issues. OIG will also conduct the annual audit of NRC's financial statements and necessary contract audit activities.	x	x	x	x
OIG will conduct 50-70 investigations and event inquiries during FY 2004. The majority will focus on violations of law or misconduct by NRC employees and contractors as well as allegations of irregularities or abuse in NRC programs and operations. Where indications of potentially systematic violations such as theft of government property or contract fraud have been raised, proactive investigations will also be conducted.	x	x	x	x



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The following tables identify the performance indicators that the OIG has established to measure its success in achieving each of the four objectives associated with General Goal 1, and summarizes OIG's performance against those indicators in FY 1999 - FY 2002.

*Objective 1.1 Conduct timely, effective, and independent audits and investigations.*

<b>Performance Indicators for Audits</b>	<b>FY 2003/FY 2004 Targets</b>
Keep average cost per audit to 1 FTE or less.	Apply 1 FTE per audit. (I)
Complete audits in 6 months or less, on average.	Complete audits in 6 months on average. (O)
Obtain satisfactory peer review to be completed every 3 years.	Achieve 100 percent compliance with audit standards per triennial peer review (FY 2000, FY 2003). (O)
Obtain agency agreement on at least 90 percent of audit recommendations.	Obtain agency agreement on 90 percent of audit recommendations. (O)
Obtain final agency action on 65 percent of audit recommendations within 1 year.	Complete final action within 1 year on 65 percent of audit recommendations. (O)

Key to Performance Indicators

Input = I    Output = O    Outcome = O

FY 2002 Performance:    0.49 FTE applied per audit.  
6.3 months per audit on average.  
100 percent compliance on limited scope internal peer review.  
100 percent agreement by agency on audit recommendations.  
72.2 percent of final actions completed on audit recommendations within 1 year.

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**FY 2001 Performance:** 0.62 FTE applied per audit.  
5.4 months per audit on average.  
100 percent feedback obtained on issued audit reports at exit conference and in resolution process.<sup>2</sup>  
93.6 percent agreement by agency on audit recommendations within 90 days of report issuance.  
63.8 percent final actions completed on audit recommendations over 1 year old.

**FY 2000 Performance:** 0.53 FTE applied per audit.  
6.9 months per audit on average.  
100 percent compliance with audit standards per peer review.  
100 percent feedback obtained on issued audit reports, and the new audit report process.

**FY 1999 Performance:** 0.48 FTE applied per audit.  
5.1 months per audit on average.  
100 percent feedback obtained on issued audit reports.  
100 percent agreement by the agency on audit recommendations.

<b>Performance Indicators for Investigations</b>	<b>FY 2003/FY 2004 Targets</b>
Complete 80 percent of all non-fraud investigations including event inquiries by the established due date.	Complete 80 percent of all non-fraud investigations including event inquiries by the established due date. (O)
Complete 90 percent of active cases in less than 2 years.	Complete 90 percent of active cases in less than 2 years. (O)
Refer 30 percent of investigations for criminal prosecution.	Achieve 30 percent rate for cases referred for criminal prosecution. (O)

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<b>Performance Indicators for Investigations</b>	<b>FY 2003/FY 2004 Targets</b>
Achieve a minimum success rate of 90 percent for actions taken by NRC management in response to investigative reports issued by OIG (e.g., additional training, program reviews and modifications).	Achieve 90 percent success rate for management actions in response to OIG investigative reports. (O)
Achieve a minimum success rate of 70 percent for Program Fraud and Civil Remedies Act (PFCRA) cases accepted by NRC's Office of General Counsel (OGC).	Achieve 80 percent acceptance rate for PFCRA referrals. (O)
Address the majority of investigative issues raised in customer surveys.	Address 90 percent of survey investigative issues. (O)
Address the majority of investigative issues identified in quality control reviews.	Address 100 percent of investigative quality control issues. (O)

**FY 2002 Performance:**

- 46 percent of all non-fraud investigations including event inquiries completed by the established due date.<sup>3</sup>
- 100 percent of active cases completed in less than 2 years.
- 50 percent rate achieved for cases referred for criminal prosecution.
- 100 percent success rate achieved for management actions in response to OIG investigative reports.
- PFCRA referrals - none.
- A customer survey was not performed this period.
- A quality control review was not performed this period.

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**FY 2001 Performance:** 68 percent of all non-fraud investigations completed by the established due date.

100 percent of active cases completed in less than 2 years.

41 percent rate achieved for cases referred for criminal prosecution.

93 percent success rate achieved for management actions in response to OIG investigative reports.

100 percent success rate achieved for PFCRA referrals.

A customer survey was not performed this period.

A quality control review was not performed this period.

**FY 2000 Performance:** 5.0 months per investigation on average.<sup>4</sup>

259.5 hours per completed investigation on average.

40 percent of cases initiated were referred.

100 percent success rate for management referrals.

PFCRA referrals - none.

100 percent of survey issues addressed.

100 percent of quality control issues addressed.

**FY 1999 Performance:** 7.96 months per investigation on average.

230 hours per completed investigation on average.

Convictions/pleas - Not applicable.

96.8 percent success rate for management referrals.

100 percent success rate for PFCRA referrals.

100 percent of survey issues addressed.

100 percent of quality control issues addressed.

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### *Objective 1.2. Proactively identify and act on current and emerging issues.*

<b>Performance Indicator for Audits</b>	<b>FY 2003/FY 2004 Targets</b>
Develop a detailed annual audit plan, listing audits to be performed and estimated required resources, with input from agency management, Congress, industry, other Government agencies, and the public.	Complete Audit Plan by October 1, 2002 for FY 2003 and October 1, 2003 for FY 2004. (I)

FY 2002 Performance: Plan completed by milestone date.

FY 2001 Performance: Plan completed by milestone date.

FY 2000 Performance: Plan completed by milestone date.

FY 1999 Performance: Plan completed in December 1998.

<b>Performance Indicator for Investigations</b>	<b>FY 2003/FY 2004 Targets</b>
Develop a detailed annual investigative plan, based in part on sources of information developed by investigative staff. Sources include members of public interest groups, NRC employees, representatives of other agencies and licensees.	Complete Investigative Plan by October 1, 2002 for FY 2003 and October 1, 2003 for FY 2004. (I)

FY 2002 Performance: Plan completed by milestone date.

FY 2001 Performance: Plan completed by milestone date.

FY 2000 Performance: Plan completed by milestone date.

FY 1999 Performance: Plan completed in May 1999.

### *Objective 1.3. Advise the NRC in areas of OIG expertise.*

<b>Performance Indicators for Audits and Investigations</b>	<b>FY 2003/FY 2004 Targets</b>
Participate in one or more targeted management projects or task forces by OIG auditors and/or investigators.	Participate in at least one project or task force by OIG auditors and/or investigators. (O)

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<b>Performance Indicators for Audits and Investigations</b>	<b>FY 2003/FY 2004 Targets</b>
Identify reports that either define agency institutional weaknesses or provide assessments as to how well NRC programs are meeting intended objectives and/or purposes.	Complete 16 reports annually in FY 2003 and 18 reports in FY 2004. <sup>5</sup> (O)

**FY 2002 Performance:** Participation on 18 task forces and special projects by OIG auditors or investigators.

Completed 21 reports.

**FY 2001 Performance:** Participation on 20 task forces and special projects by OIG auditors or investigators.

Completed 19 reports.

**FY 2000 Performance:** Participation on seven tasks forces and management projects by OIG auditors and investigators.

Completed 21 reports.

**FY 1999 Performance:** Participation on two intergovernmental task forces by OIG investigators.

Completed 18 reports.

### ***Objective 1.4. Enhance programs for prevention and awareness of fraud, waste, and abuse.***

<b>Performance Indicator for Audits and Investigations</b>	<b>FY 2003/FY 2004 Targets</b>
Complete annual training for NRC employees and others, in areas most at risk for fraud, waste, and abuse.	Conduct training at major Headquarter's components and/or NRC regional offices. Training will be provided by senior members of the OIG staff. (O)
	Fraud awareness training will be provided by OIG investigative staff to NRC Contract Project Officers/Managers and other identified employees. (O)

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- FY 2002 Performance:**    **Misconduct and fraud awareness training conducted in 2 regions.**  
**Training provided to NRC Project Officers/Managers on detecting contract fraud indicators.**  
**Training was presented at NRC regional offices in February through May 2002.**  
**One OIG fraud bulletin was issued.**  
**OIG General Counsel conducted the "Fraud for Auditors" course at the Inspector General Audit Training Institute.**  
**OIG General Counsel led a session on legal issues to Federal, State and municipal Inspectors General at American University.**
- FY 2001 Performance:**    **Misconduct and fraud awareness training conducted in 3 regions.**  
**Security awareness crime prevention training provided to NRC employees.**  
**Training provided to NRC Project Officers/Managers on detecting contract fraud indicators.**  
**OIG briefed employees at NRC Decommissioning Counterpart Meeting.**  
**OIG briefed senior regional managers in all four regions.**  
**One OIG fraud bulletin was issued.**
- FY 2000 Performance:**    **Computer security awareness presentation conducted by OIG investigators.**  
**Fraud awareness briefings were presented to NRC's Division of Contracts and Property Management and Region II personnel. Two OIG fraud bulletins were also issued.**

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**FY 1999 Performance:**    **OIG participated in training for Office of the General Counsel  
Regional Councils.**

**As part of OIG's ongoing educational effort within the agency and  
the community at large, OIG published a brochure on "Fraud  
Awareness."**



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<b><u>General Goal 2 (Strategic Goal)</u></b>
<b>To keep our stakeholders well-informed, OIG will enhance its communication and liaison activities with OIG's customers, including NRC management, the U.S. Congress, Government agencies, the nuclear industry, and public entities.</b>
<b>Objectives (Strategies)</b> 1. Develop and maintain liaison activities with OIG customers.
<b>FY 2004 Activities</b>
Periodically meet with the NRC Chairman, the Commission, other key NRC executives and members of Congress. Hold planning conferences and invite customers for input, provide reports to Congress summarizing results of OIG activities and accomplishments.

The following table identifies the performance indicators that the OIG has established to measure its success in achieving the primary objectives associated with General Goal 2, and summarizes OIG's performance against those indicators in FY 1999 - FY 2002.

### ***Objective 2.1. Develop and maintain liaison activities with OIG customers.***

<b>Performance Indicators for the Office</b>	<b>FY 2003/FY 2004 Targets</b>
OIG management will meet periodically each year with NRC's senior management officials to discuss emerging issues.	OIG management will meet at least quarterly each year with NRC's senior management officials to discuss emerging issues. (O)
OIG management will brief the NRC Chairman and the NRC Commissioners periodically on OIG matters.	OIG management will brief the Chairman monthly and the Commissioners quarterly on OIG matters. (O)
OIG management will meet periodically with appropriate Congressional Committees and issue summaries of audits and investigations to the U.S. Senate Committee on Governmental Affairs.	OIG management will meet twice each year with appropriate oversight committees and provide quarterly summaries of reports to the Committee on Governmental Affairs. (O)
OIG will timely produce and appropriately distribute a Semiannual Report to Congress and other interested parties.	Semiannual reports will be distributed no later than one month following the end of the reporting period. (O)
OIG will make publicly releasable reports available to the public in a timely manner.	Audit reports, investigative event inquiries, and the Semiannual Report to Congress will be on the Internet within 4 weeks of issuance. (O)
OIG will reply in a responsive manner to public inquiries.	Respond to 90 percent of all FOIA/PA requests within deadlines established by law, applicable regulations, and OIG policy, with an appeal ratio of 20 percent or less. (O)

## **INSPECTOR GENERAL**

<b>Performance Indicators for the Office</b>	<b>FY 2003/FY 2004 Targets</b>
OIG investigators will be assigned liaison responsibilities for designated Government agencies and meet with representatives of these agencies on a periodic basis.	Investigators will meet quarterly with designated Government agency representatives and report results to the Assistant Inspector General for Investigations. (O)
OIG representatives will interact with public interest groups involved with nuclear safety issues.	Perform liaison activities monthly. (O)

**FY 2002 Performance:**      **OIG management met quarterly with NRC's senior management.**

**Chairman received most monthly briefings and each Commissioner was periodically briefed at least three times.<sup>6</sup>**

**Met three times with appropriate oversight committees.**

**Quarterly summaries were timely provided to oversight committees and quarterly summaries of reports provided to the Committee on Governmental Affairs.**

**Semiannual reports were issued within 1 month after close of reporting period.**

**Audit reports and semiannual reports were available on the Internet within 4 weeks of issuance.**

**95 percent of all FOIA/PA requests were responded to within established deadlines, with an appeal ratio less than 20 percent.**

**Investigators met with most designated Government agency representatives on a quarterly basis and reported results to the Assistant Inspector General for Investigations.<sup>7</sup>**

**OIG performed monthly liaison activities.**

**FY 2001 Performance:**      **Met at least three times with the EDO, CFO, CIO, and General Counsel.**

**Chairman received monthly briefings and each Commissioner received a quarterly briefing.**

**Met three times with appropriate oversight committees.**

## **INSPECTOR GENERAL**

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Quarterly summaries were timely provided to oversight committees and quarterly summaries of reports were provided to the Committee on Governmental Affairs.

Semiannual reports were issued within 1 month after the close of the reporting period.

Audit reports, investigative event inquiries and semiannual reports were available on the Internet within 4 weeks of issuance.

Investigators met quarterly with designated Government agency representatives and reported results to the Assistant Inspector General for Investigations.

OIG performed monthly liaison activities.

**FY 2000 Performance:** Met four times with the EDO, CFO, CIO, and General Counsel.

Chairman received monthly briefings and each Commissioner received a quarterly briefing.

Quarterly summaries were timely provided to oversight committees.

Semiannual reports were issued within 1 month after the close of the reporting period.

Audit reports were available on the Internet within 4 weeks of issuance.

Event Inquiries were made publicly available upon issuance. Internet target not met.

Investigators met with designated agencies on a routine basis.

OIG performed liaison activities with public interest groups.

**FY 1999 Performance:** Met four times with the EDO, CFO, CIO, and General Counsel.

Chairman received monthly briefings and each Commissioner received a quarterly briefing.

Quarterly summaries were timely provided to oversight committees.

## **INSPECTOR GENERAL**

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Semiannual reports were issued within 1 month after close of reporting period.

Audit reports were available on the Internet within 4 weeks of issuance.

All investigative Event Inquiries were made publicly available upon issuance. Internet target not met.

Investigators met with approximately 14 designated agencies on a quarterly basis.

OIG performed monthly liaison activities.

## INSPECTOR GENERAL

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<b><u>General Goal 3 (Strategic Goal)</u></b>
<b>OIG will make value-added policy, legislative, and regulatory recommendations relating to NRC's programs and operations.</b>
<b><u>Objectives</u></b> 1. Review existing and proposed legislation and regulations.
<b><u>FY 2004 Activities</u></b>
OIG will review existing and proposed policy legislation, and regulations relating to NRC's programs and operations. OIG will provide timely reports that make recommendations concerning the impact of such legislation or regulations as they pertain to economy and efficiency of programs and operations and vulnerability to fraud, waste and abuse.

The following table identifies the performance indicators that the OIG has established to measure its success in achieving the primary objective associated with General Goal 3, and summarizes OIG's performance against those indicators in FY 1999 - FY 2002.

*Objective 3.1. Review existing and proposed legislation and regulations.*

<b>Performance Indicators for OIG General Counsel</b>	<b>FY 2003/FY 2004 Targets</b>
90 percent of responses to requests from the agency for comment/input on existing and proposed legislation and regulations will be made within the due date(s).	90 percent of requests will be reviewed within the due date. (O)
NRC will take responsive action on the majority of OIG comments relating to the review of proposed policy, legislation, and regulations.	OIG will obtain agency agreement to take responsive actions to comments in 60 percent of the matters reviewed. (O)

FY 2002 Performance: Targets were met.

FY 2001 Performance: Targets were met.

FY 2000 Performance: Targets were met.

FY 1999 Performance: Targets were met.

## INSPECTOR GENERAL

<b>General Goal 4 (Strategic Goal)</b>			
<b>OIG will improve the effectiveness of its efforts in conducting activities for the purpose of preventing and detecting fraud, waste and abuse in NRC's programs and operations by ensuring the economical, efficient and effective operation of our office.</b>			
<b>Objectives</b> 1. Maximize organizational efficiency and effectiveness. 2. Evaluate the sufficiency of the current Issue Area Monitor (IAM) Program. 3. Develop a specialized training program and increase the organizational knowledge of the OIG staff.			
<b>FY 2004 Activities</b>	<b>Objectives</b>		
	1	2	3
OIG will evaluate the OIG report production process and determine where and how they can be streamlined. OIG will also assess the efficiency of current methods for information distribution within OIG and establish a means to allow OIG staff to provide direct input to the IG/Deputy IG regarding audit and investigative issues.	x		
OIG will evaluate how current agency issue areas are monitored and consider whether it is appropriate to expand the current OIG program, which is currently an audit staff function, to include investigations.		x	
OIG will establish a specialized training program for the OIG staff to enhance awareness of investigative, audit, legal and pertinent legislative processes.			x

The following tables identify the performance indicators that the OIG has established to measure its success in achieving each of the three objectives associated with General Goal 4, and summarizes OIG's performance against those indicators in FY 1999 - FY 2002.

### *Objective 4.1. Maximize organizational efficiency and effectiveness.*

<b>Performance Indicators for the Office</b>	<b>FY 2003/FY 2004 Targets</b>
OIG will evaluate its process for producing reports.	OIG will review the OIG report production process on an annual basis. (O)
OIG will evaluate the way it processes information to determine potential inefficiencies and barriers to effective communication.	OIG will implement the audit and investigation components of its Management Information System (MIS) in FY 2003. (O)
The IG and Deputy IG will schedule periodic meetings with OIG staff in order to obtain direct input regarding audit and investigative issues.	The IG and Deputy IG will meet directly with OIG audit and investigative staff on a semiannual basis each year to obtain input on audit and investigative issues. (O)

## **INSPECTOR GENERAL**

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**FY 2002 Performance:** The report production process was evaluated as part of the migration to AutoAudit and an internal investigative quality assurance review.

The audit and investigative components of the Management Information System (MIS) was not implemented in FY 2002, as well as defining requirements and preparing the business case analysis for the Resource Management and Operational Support component. The MIS audit and investigative components are scheduled for completion in FY 2003.<sup>a</sup>

IG and Deputy IG met directly with OIG audit and investigative staff on a semiannual basis.

**FY 2001 Performance:** The report production process was evaluated.

A business requirements analysis was completed for the OIG MIS.

IG and Deputy IG met directly with OIG audit and investigative staff.

**FY 2000 Performance:** The report production process was evaluated. As a result, a new discussion draft report process was initiated and the exit conference process was revised.

A followup review addressing the information retrieval issue was conducted and a new database system was designed and developed.

IG and Deputy IG met three times with audit and investigative staff.

**FY 1999 Performance:** An initial assessment addressing the information retrieval issue was completed and the report preparation process was reviewed.

IG and Deputy IG met quarterly with audit and investigative staff.

*Objective 4.2. Evaluate the sufficiency of the current Issue Area Monitor (IAM) program.*

## **INSPECTOR GENERAL**

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<b>Performance Indicator for the Office</b>	<b>FY 2003/FY 2004 Targets</b>
OIG will use a team approach to review the IAM process.	A review will be completed in FY 2002. With the completion of the IAM review in FY 2002, objective has been satisfied and will be closed in FY 2003. (O)

- FY 2002 Performance:** A review of the Issue Area Monitor program was completed and resulted in a revision to the Audit Manual.
- FY 2001 Performance:** A review of the Issue Area Monitor program was initiated in FY 2001 and will be completed in FY 2002.
- FY 2000 Performance:** A review was completed in the first quarter and a summary report issued in the second quarter of FY 2000.
- FY 1999 Performance:** The Issue Area Monitor program was reviewed in November 1999.

*Objective 4.3. Develop a specialized training program and increase the organizational knowledge of the OIG staff.*

<b>Performance Indicators for Audits</b>	<b>FY 2003/FY 2004 Targets</b>
Auditors will obtain Continuing Professional Education (CPE) in accordance with Government Auditing Standards.	Each OIG auditor will complete a minimum of 20 hours of CPEs in each year and a total of 80 hours for both years combined. Of the 80 hours, 24 hours must be directly related to Government environment and to Government auditing. For entry-level employees with less than 2 years with the audit organization, a pro rata number of hours will be acceptable. (O)
Newly hired OIG auditors will attend an NRC-developed technical training course or technical conference. <sup>9</sup>	At least 50 percent of newly hired auditors will complete an NRC-developed training course or technical conference. (O)

- FY 2002 Performance:** Auditors met CPE requirements. Technical training target met.



## **INSPECTOR GENERAL**

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**FY 2001 Performance:** Auditors met training and Individual Development Plan (IDP) requirements. Technical training target not met.

**FY 2000 Performance:** Auditors met training requirements. IDP target not met.<sup>10</sup>

**FY 1999 Performance:** Auditors met training requirements. IDP target not met.

<b>Performance Indicators for Investigations</b>	<b>FY 2003/FY 2004 Targets</b>
Investigators will attend periodic technical training relevant to NRC operations and refresher training relating to their law-enforcement function.	Each investigator will receive at least 40 hours of training. (O)
Newly hired investigators will attend an NRC-developed training course or technical conference. <sup>11</sup>	At least 50 percent of newly hired investigators will complete an NRC-developed training course or technical conference. (O)

**FY 2002 Performance:** Investigators met training requirements. Technical training target met.

**FY 2001 Performance:** Investigators met training requirements. IDP and technical training targets not met.

**FY 2000 Performance:** Investigators met training requirements. IDP target met.<sup>12</sup>

**FY 1999 Performance:** Investigators met training requirements. IDP target not met.

### **Verification and Validation of Measured Values and Performance**

The OIG uses numerous small database systems to measure OIG performance, e.g., Microsoft Access and Clipper applications. In some instances, customer and other stakeholder surveys, as well as peer reviews, are used to determine whether OIG has achieved its stated goals.

### **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.

## **INSPECTOR GENERAL**

### **FY 2004 Office of the Inspector General Links to Performance Goals**

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

<b>Links to Arena Performance Goals</b>	<b>Performance Goals</b>			
	<b>Add Value to NRC Programs</b>	<b>Enhance Communication</b>	<b>Make Value-Added Policy and Regulatory Recommendations</b>	<b>Improve Effectiveness</b>
<b>FY 2004 Programs (\$7,300K 47 FTE)</b>				
<b>Audits (\$3,476K, 21 FTE)</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
<b>Investigations (\$2,559K, 18 FTE)</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>
<b>Management and Operational Support (\$1,265K, 8 FTE)</b>	<b>X</b>	<b>X</b>	<b>X</b>	<b>X</b>

## **INSPECTOR GENERAL**

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### **NOTES**

1. Resources for the CFO audit and other technical assistance was partially funded in FY 2002 with \$600,000 in OIG carryover funds.
2. The performance indicator to obtain customer feedback on timeliness and quality of audits was closed in FY 2001 due to ineffectiveness of performance indicator since each audit is required to have 100 percent customer feedback.
3. Completion of five investigations was delayed because OIG special agents were participating in efforts related to the Government's response to the attacks on the World Trade Center and the Pentagon on September 11, 2001. These efforts included special agents assigned to the Joint Terrorism Task Force in New York City and the NRC's Incident Response Office, as well as investigative staff called to duty. Further, investigative cases and personnel resources were realigned in FY 2002 as a result of investigative staff shortages.
4. Performance indicator was revised in FY 2001 to reflect a change in measuring elapsed time for fraud and non-fraud investigations from an average number of hours to an age of active cases with a target of 90 percent that are less than 2 years old.
5. FY 2004 target for reports was increased to reflect the new audit team.
6. Because of schedule conflicts, OIG management was unable to brief the NRC Chairman on a monthly basis and NRC Commissioners on a quarterly basis.
7. Because of investigative staff shortages, OIG investigators were unable to meet with designated Government agency representatives on a quarterly basis.
8. Because of budgetary constraints, conflicting priorities, and administrative hurdles, the OIG Management Information System (MIS) was not implemented in FY 2002. The audit and investigative components of the MIS will be implemented in FY 2003. Implementation of the audit and investigative components is necessary before preliminary work can be initiated for the Resource Management and Operational Support (RMOS) component. This administrative program target is being deleted from the performance plan.
9. The performance indicator and target were modified to expand the number of technical training courses that can be attended to meet the objective.
10. The performance indicator was closed in FY 2001 because of the voluntary nature of an Individual Development Plan (IDP). Further, the acquisition of Continuing Professional Education (CPE) as required by Government Auditing Standards for auditors and attendance at an NRC-developed training course or technical conference are considered to be better indicators of performance.
11. The performance indicator and target were modified to expand the number of technical training courses that can be attended to meet the objective.

## **INSPECTOR GENERAL**

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12. The performance indicator was closed in FY 2001 because of the voluntary nature of an Individual Development Plan (IDP). Further, the acquisition of Continuing Professional Education (CPE) as required by Government Auditing Standards for auditors and the attendance at an NRC-developed training course or technical conference are considered to be better indicators of performance.

## **APPENDICES**



## **APPENDIX I**

### **SUPPORTING TABLES**

**APPENDIX I  
SUPPORTING TABLES**

**BUDGET AUTHORITY BY FUNCTION**

NRC Appropriation	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Salaries and Expenses (S&E) (\$K)				
Salaries and Benefits	314,104	331,000	346,010	15,010
Contract Support	224,857	233,685	259,210	25,525
Travel	13,509	13,499	13,580	81
Total (S&E)	552,470	578,184	618,800	40,616
Office of the Inspector General (OIG) (\$K)				
Salaries and Benefits	5,300	5,500	5,975	475
Contract Support	660	1,080	1,095	15
Travel	220	220	230	10
Total (OIG)	6,180	6,800	7,300	500
Total NRC Appropriation (\$K)				
Salaries and Benefits	319,404	336,500	351,985	15,485
Contract Support	225,517	234,765	260,305	25,540
Travel	13,729	13,719	13,810	91
Total (NRC)	558,650	584,984	626,100	41,116



**APPENDIX I: SUPPORTING TABLES**

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**PROGRAM FINANCING**

	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Nuclear Waste Fund	23,650	24,900	33,100	8,200
General Fund	55,960	61,147	47,440	-13,707
Fee Collections	479,040	498,937	545,560	46,623
Total	558,650	584,984	626,100	41,116

**APPENDIX I: SUPPORTING TABLES****HOMELAND SECURITY**

	FY 2002 Enacted	FY 2003 Estimate	FY 2004 Estimate	
			Request	Change from FY 2003
Budget Authority by Strategic Arena (\$K)				
Nuclear Reactor Safety	26,023	17,895	33,909	16,014
Nuclear Materials Safety	6,473	6,405	17,661	11,256
Nuclear Waste Safety	4,280	4,253	640	-3,613
International Nuclear Safety Support	806	823	890	67
Management and Support	5,370	5,974	0	-5,974
Total Budget Authority	42,952	35,350	53,100	17,750
Full-Time Equivalent Employment by Strategic Arena				
Nuclear Reactor Safety	63	78	125	47
Nuclear Materials Safety	20	25	35	10
Nuclear Waste Safety	6	7	5	-2
International Nuclear Safety Support	6	6	6	0
Management and Support	0	0	0	0
Total FTE	95	116	171	55

## **APPENDIX II**

# **LEGISLATIVE PROJECTIONS**

## APPENDIX II

<b>U.S. NUCLEAR REGULATORY COMMISSION</b> <b>LEGISLATIVE PROGRAM PROJECTIONS</b> (Dollars in Millions)				
	<b>SALARIES AND EXPENSES APPROPRIATION</b>		<b>INSPECTOR GENERAL APPROPRIATION</b>	
	Budget Authority <sup>1</sup>	Budget Outlays <sup>1</sup>	Budget Authority <sup>1</sup>	Budget Outlays <sup>1</sup>
FY 2003 Enacted	578	570	6	7
FY 2004 Estimate	619	610	7	7
FY 2005 Estimate	632	629	7	7
FY 2006 Estimate	644	641	7	7
FY 2007 Estimate	658	655	7	7
FY 2008 Estimate	675	671	8	7

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<sup>1</sup> Projections as reported in OMB's MAX database.

**APPENDIX III**  
**VERIFICATION AND VALIDATION**  
**OF NRC MEASURES AND METRICS**

### **APPENDIX III**

#### **VERIFICATION AND VALIDATION OF NRC MEASURES AND METRICS**

##### **The NRC's data collection procedures**

Most of the data used to measure the NRC's performance against its strategic and performance goals related to maintaining safety are obtained or derived from the NRC's abnormal occurrence (AO) data and reports submitted by licensees. The NRC developed its AO criteria in order to comply with the legislative intent of Section 208 of the Energy Reorganization Act of 1974, as amended. The Act requires the NRC to inform Congress of unscheduled incidents or events that the Commission determines to be significant from the standpoint of public health and safety. Events that meet the AO criteria are included in an 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 regulated by the NRC and the Agreement States.

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

The NRC has established procedures for the systematic review and evaluation of events reported by NRC licensees and Agreement State licensees. The objective of the review is to identify events that are significant from the standpoint of public health and safety based on criteria that include specific thresholds. The NRC uses a number of sources to determine the reliability and the technical accuracy of event information reported to the NRC. Such sources include (1) the NRC licensee reports, which are carefully analyzed, (2) NRC inspection reports, (3) Agreement State reports, (4) periodic review of Agreement State regulatory programs, (5) NRC consultant/contractor reports, and (6) U.S. Department of Energy Operating Experience Weekly Summaries. In addition, there are daily interactions and exchanges of event information between headquarters and the regional offices, as well as periodic conference calls between headquarters, the regions, and Agreement States to discuss event information. Identified events that meet the AO criteria are validated and verified by all applicable NRC headquarters program offices, regional offices, and agency management before submission to Congress.

### **APPENDIX III: VERIFICATION AND VALIDATION OF NRC MEASURES AND METRICS**

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Data protection is maintained by the agency's computer security program, which provides administrative, technical, and physical security measures to protect 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 is processed, stored, or produced on designated automated information systems.

#### **Validation and Verification for Each Strategic and Performance Measure**

The discussion of NRC's data verification and validation for each individual strategic and performance goal measure is divided into two parts. Specifically, Section 1, of this appendix addresses the safety-related strategic and performance goals and measures for each arena, and Section 2, addresses all of the non-safety-related performance goals and measures for each arena. The reason for this division is two-fold. First, many of the non-safety-related performance goals and measures are the same across the arenas, and combining similar performance goals across the arenas eliminates unnecessary duplication. Second, the non-safety-related performance goals and measures were introduced in the NRC's Strategic Plan for FY 2000–FY 2005 and are less developed than the safety-related performance goals and measures, most of which have been in place for several years and have been refined over time.

## **APPENDIX III: VERIFICATION AND VALIDATION OF NRC MEASURES AND METRICS**

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### **SECTION 1**

#### **Safety-related Strategic and Performance Goals**

##### **Nuclear Reactor Safety**

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

***Strategic Goal:*** Prevent radiation-related deaths and illnesses, promote the common defense and security, and protect the environment in the use of civilian nuclear reactors.

##### ***Measures:***

- ***No nuclear reactor accidents.***
- ***No deaths resulting from acute radiation exposures from nuclear reactors.***
- ***No events at nuclear reactors resulting in significant radiation exposures.***
- ***No events that result in releases of radioactive material from nuclear reactors causing an adverse impact on the environment.***

***Verification:*** Licensees report any nuclear reactor events at their facilities in licensee event reports (LERs). The NRC then uses its Sequence Coding and Search System to review the LER data. The NRC's abnormal occurrence 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. Any nuclear reactor accidents, deaths from acute radiation exposure from nuclear reactors, events at nuclear reactors that result in significant radiation exposure, or events that result in releases of radioactive material from reactors that cause an adverse impact on the environment that meet the criterion for an abnormal event would be identified through LERs. 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 contained in the licensee's report. In addition, a resident inspector on duty at each reactor monitors the facility on a real-time basis. The resident inspector verifies the safe operation of the facility and would be



### **APPENDIX III: VERIFICATION AND VALIDATION OF NRC MEASURES AND METRICS**

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aware of any instances in which core damage has occurred or any instance in which radiation was released from the reactor in excess of reporting limits.

The NRC staff prepares abnormal occurrence write-ups and evaluates events using specific criteria to select those events that the staff recommends to the Commission to be considered abnormal occurrences. The NRC's Office of Nuclear Regulatory Research makes the final determination of which events should be recommended to be considered potential abnormal occurrences. NRC Management Directive 8.1 "Abnormal Occurrence Reporting Procedure," provides thorough documentation of the abnormal occurrence reporting process.

**Validation:** No nuclear reactor accidents. Nuclear reactor accidents are those that result in significant core damage and have the potential to endanger public safety or to harm the environment.

No deaths resulting from acute radiation exposures from nuclear reactors. Determining whether or not 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 were to occur, it would result in 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 goal measure is a direct measurement of the occurrence of radiation-related deaths at nuclear reactors.

No events at nuclear reactors resulting 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.

No events that result in releases of radioactive material from nuclear reactors causing an adverse impact on the environment. 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 with which radiation is released into the environment in excess of specified limits. Appendix A to NUREG-0090, Criterion 1.B.1 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

### **APPENDIX III: VERIFICATION AND VALIDATION OF NRC MEASURES AND METRICS**

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LERs, which are sent to the NRC as reportable occurrences. This strategic goal measure is a direct measurement of instances in which harmful impacts on the environment occur from nuclear reactors.

- ***No radiological sabotages at nuclear reactors.***

**Verification:** Licensees are required to call the NRC to report any breaches of security or other event that may potentially lead to sabotage at a nuclear facility within 1 hour of its occurrence. The NRC's safeguard requirements are described in Section 73.71 of 10 CFR Part 73, "Physical Protection of Plants and Materials," and Appendix G to 10 CFR Part 73, "Reportable Safeguards Events." Information Assessment Teams conduct followup assessments for any significant events to determine what further actions are needed. The licensee also files a written report within 30 days of the incident to describe the incident and the steps that the licensee took to protect the nuclear facility. This information enables the NRC to adequately assess whether a radiological sabotage has occurred.

**Validation:** The events to be reported are those that endanger nuclear reactor facilities by deliberate acts of sabotage directed against those facilities. Events of this type are extremely rare. If such an event were to occur, it would result in prompt and thorough investigation of the event, its consequences, its root causes, and the necessary actions by the licensee and/or NRC to mitigate the situation and prevent recurrence. The investigation ensures the validity of the information and assesses the significance of the event.

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

**Measures:**

- ***No more than one event per year identified as a significant precursor of a nuclear accident.***

**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 an SCSS 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. The second step is to conduct an engineering review of these screened events, using specific criteria, to identify those events requiring detailed analysis

### **APPENDIX III: VERIFICATION AND VALIDATION OF NRC MEASURES AND METRICS**

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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. Lastly, findings from the analyses are provided to the licensee and the public.

**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.

- *No statistically significant adverse industry trends in safety performance.*

**Verification:** The data for this performance measure are derived from data supplied by all power plant licensees in LERs, and monthly operating reports, as well as performance indicator data submitted for the reactor oversight process (ROP). These data are required by 10 CFR 50.73 and/or plant-specific technical specifications, or are 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 licensees' 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, input the data into 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. The experience and training of key personnel is controlled through administration of the contract. The contractor identifies discrepancies to both licensees and the NRC for resolution. The NRC reviews the indicators and publishes them on the agency's Web site on a quarterly basis. The agency also incorporates feedback from licensees and the public, where appropriate.

**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 provide 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 addressing 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.

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The Industry Trends Program is reviewed by senior agency managers on an annual basis, and the results are reported to the Commission.

- *No events resulting in radiation overexposures from nuclear reactors that exceed applicable regulatory limits.*

**Verification:** Licensees report overexposures through the 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. Finally, 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 in excess of 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.

- *No more than three releases per year to the environment of radioactive material from nuclear reactors that exceed the regulatory limits.*

**Verification:** As with overexposures, licensees report environmental releases of radioactive materials through the SCSS LER database maintained at the Oak Ridge National Laboratory. The SCSS database will be utilized 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 can be harmful if not properly controlled. Consequently, the NRC tracks all releases of radioactive materials in excess of regulatory limits as a performance measure because they have the potential to endanger public safety or harm the environment.

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- ***No breakdowns of physical security that significantly weaken the protection against radiological sabotage or theft or diversion of special nuclear materials in accordance with abnormal occurrence criteria.***

**Verification:** Licensees are required to report to the NRC within 1 hour any known breakdowns of physical security, based on the requirements in Section 73.71 of 10 CFR Part 73, "Physical Protection of Plants and Materials," and Appendix G to Part 73, "Reportable Safeguards Events." 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's initial telephonic notification(s) must be followed within a period of 30 days by a written report submitted to the NRC.

Once each quarter, the NRC staff evaluates all of the reported events based on the criteria contained in 10 CFR 73.71, prepares a summary of the evaluation results is prepared and reports the findings in the NRC office operating plan. The NRC also reports events to the public on an annual basis in the "Safeguards Summary Event Lists," NUREG-0525, 1999, Vol. 3. While all details of the event (sensitive security safeguards information) may not be available to the public, the existence of all events is made public.

**Validation:** The events to be reported are those that threaten nuclear activities by deliberate acts, such as radiological sabotage, directed against reactor facilities. If a licensee reports such an event, the Information Assessment Team evaluates and validates the initial report and determines what further actions may be necessary. Tracking breakdowns of physical security gives an indication of 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.

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### **Nuclear Materials Safety**

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

***Strategic Goal:*** Prevent radiation-related deaths and illnesses, promote the common defense and security, and protect the environment in the use of source, byproduct, and special nuclear material.

#### ***Measures:***

- ***No deaths resulting from acute radiation exposures from civilian uses of source, byproduct, or special nuclear materials, or deaths from other hazardous materials used or produced from licensed material.***

***Verification:*** Events resulting in deaths could be reported to the NRC and/or Agreement States through a number of sources, but primarily through required licensee notifications. These events are summarized in event notifications and preliminary notifications, which are used to widely disseminate the information to the appropriate managers and staff. For activities related to the Nuclear Materials Safety arena, the NMED is an essential system used to collect information on such events. For fuel cycle activities, this extends to other hazardous materials used with, or produced from, licensed material consistent with 10 CFR Part 70. The decision on whether or not to ascribe the cause of a death to conditions related to acute radiation exposures, or other hazardous materials, is made by the NRC or Agreement State technical specialists, or our consultants. The fuel cycle and materials inspection programs are key elements in verifying the completeness and accuracy of licensee reports. The Integrated Materials Performance Evaluation Program (IMPEP) also provides a mechanism to verify that Agreement States and NRC regions are properly collecting and reporting such events as received from the licensees, and entering them into NMED.

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

***Validation:*** Determining whether or not any deaths result from acute radiation exposure is valid and fundamentally essential to protecting public health and safety. Events of this magnitude are not expected and would be rare. If such an event were to occur, it would result in prompt and thorough

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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.

- ***No more than six events per year resulting in significant radiation or hazardous material exposures from the loss or use of source, byproduct, and special nuclear materials.***

**Verification:** Events meeting this threshold would be reported to the NRC and/or Agreement States through a number of sources, but primarily through required licensee notifications. Event notifications and preliminary notifications are used to communicate this information internally. For activities related to the Nuclear Materials Safety arena, the NMED is an essential system used to collect information on such events.

Significant exposures are defined as those that result in unintended permanent functional damage to an organ or a physiological system as determined by a physician, as agreed upon by NRC or Agreement State technical specialists, or our consultants. Hazardous material exposures only apply to fuel cycle activities in the Nuclear Materials Safety arena. For fuel cycle activities, this extends to other hazardous materials used with, or produced from, licensed material consistent with 10 CFR Part 70. The fuel cycle and materials inspection programs are key elements in verifying the completeness and accuracy of licensee reports. The IMPEP also provides a mechanism to verify that Agreement States and NRC regions are properly collecting and reporting such events as received from the licensees, and entering them into NMED.

Recently, 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 periodic staff reviews, emphasis and analysis during the IMPEP reviews, NMED training in the regions and in Agreement States, and discussions at all Agreement State and CRCPD meetings.

**Validation:** Any event resulting in unintended permanent functional damage to an organ or physiological system compromises public health and safety. Events of this magnitude are infrequent. If such an event were to occur, it would result in prompt and thorough investigation of the event, its consequences, its root causes, and the necessary actions needed by the licensee and NRC to mitigate the situation and prevent recurrence. In addition to these immediate actions, the NRC holds periodic Generic Assessment Panel meetings, where management validates previously screened events.

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- ***No events resulting in releases of radioactive material resulting from civilian uses of source, byproduct, or special nuclear materials that cause an adverse impact on the environment.***

**Verification:** Events meeting this threshold would be reported to the NRC and/or Agreement States through a number of sources, but primarily through required licensee notifications. Event notifications and preliminary notifications are used to communicate this information internally. For activities related to the Nuclear Materials Safety arena, the NMED is an essential system used to collect information on such events.

Releases that have the potential to cause "adverse impact" are currently undefined. As a surrogate, we will use those that exceed the limits for reporting AOs as given in AO criteria 1.B.1. The fuel cycle and materials inspection programs are key elements in verifying the completeness and accuracy of licensee reports. The IMPEP also provides a mechanism to verify that Agreement States and NRC regions are properly collecting and reporting such events as received from the licensees, and entering them into NMED.

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

**Validation:** The events reported under this measure are those that threaten the environment. Events of this magnitude are not expected and would be rare. If such an event were to occur, it would result in prompt and thorough investigation of the event, its consequences, its root causes, and the necessary actions by the licensee and NRC to mitigate the situation and prevent recurrence. In addition to these immediate actions, the NRC holds periodic meetings, where staff and management validate previously screened events.

- ***No losses, thefts, or diversion of formula quantities of strategic special nuclear material; radiological sabotages; or unauthorized enrichment of special nuclear material regulated by the NRC.***

**Verification:** Licensees are required to report events that involve losses, thefts, or diversions of formula quantities of strategic special nuclear material; radiological sabotage; or unauthorized enrichment of special nuclear material regulated by the NRC to the NRC Headquarters Operations Center within 1 hour of their occurrence. The licensee is also required to submit to the NRC a followup written report within 30 days of the event. Such reports must include sufficient information for NRC analysis and evaluation. Events are entered and tracked in the NMED.



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The NRC initiates independent investigations that verify the reliability of reported information. NRC investigation teams evaluate the validity of materials event data, in order to assure that licensees are reporting and collecting the proper event data. Any failures of appropriate licensee reporting would be discovered through the routine inspection program. The NRC also holds periodic meetings to validate previously screened events.

**Validation:** Events collected under this performance measure are actual losses, thefts, diversions of formula quantities of strategic special nuclear material; actual radiological sabotage; or unauthorized enrichment of special nuclear material. 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. This measure does not apply to attempts to steal, divert, or enrich special nuclear material without authorization. Attempts to steal, divert, or inappropriately enrich special nuclear material are covered by a parallel measure at the performance goal level. The information reported under 10 CFR Parts 73 and 74 is required so that the NRC is aware of events that could endanger public health and safety or national security. Any strategic-plan-level failures would result in immediate investigation and followup.

- ***No unauthorized disclosures or compromises of classified information causing damage to national security.***

**Verification:** Any alleged or suspected violations of the Atomic Energy Act, Espionage Act, or other Federal statutes related to classified information are reported to the NRC under the requirements of 10 CFR 95.57. However, for performance reporting, the NRC only counts those disclosures or compromises that actually cause damage to national security. Such events are reported to the cognizant security agency (i.e., the security agency with jurisdiction) and the regional administrator of the appropriate NRC regional office, as listed in Appendix A to 10 CFR Part 73. The regional administrator then contacts the Division of Facilities and Security at NRC headquarters, which assesses the violation and notifies other offices of the NRC as well as other Government agencies, as appropriate. A determination is then made as to whether the compromise caused damage to national security. Any unauthorized disclosures or compromises of classified information causing damage to national security would result in immediate investigation and followup by the NRC.

**Validation:** Events collected under this performance measure are unauthorized disclosures of classified information causing damage to national security. Events of this magnitude are not expected and would be rare. If such an event were to occur, it would result in prompt and thorough investigation, 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 in order to ensure that licensees are reporting and collecting the proper event data.

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

**Measures:**

- ***No more than 300 losses of control of licensed material per year.***

**Verification:** Events meeting this threshold would be reported to NRC and/or Agreement States through a number of sources, but primarily through required licensee notifications. Event notifications and preliminary notifications are used to communicate this information internally. For activities of the Office of Nuclear Material Safety and Safeguards (NMSS), the NMED is an essential system used to collect information concerning such events. This measure tracks reportable incidents of material entering the public domain in an uncontrolled manner. Many of the events counted here do not, on an individual basis, have a public health and safety impact. For example, most losses of control of licensed material involve shielded material, which is unlikely to result in overexposures or releases to the environment. However, such losses are included because they may indicate licensee program weaknesses, which, if ignored, could later trigger a more significant problem. The Materials Inspection program is a key element in verifying the completeness and accuracy of licensee reports. The IMPEP also provides a mechanism to verify that Agreement States and NRC regions are properly collecting and reporting such events as received from the licensees, and entering them into NMED.

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

**Validation:** Nuclear material outside the control of the licensee has the potential to compromise public health and safety, and/or the environment, and also has potential safeguards consequences. The NRC holds periodic meetings, where staff and management validate previously screened events.

- ***No occurrences of accidental criticality.***

**Verification:** Inadvertent criticality accidents are required to 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 are required to 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

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70.50(c)(2) and 10 CFR 76.120(d)(2). The NRC dispatches an Augmented Inspection Team to confirm the reliability of the data. The event is also tracked by the NMED. An event of this nature is immediately investigated and followed-up by the NRC.

**Validation:** 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 were to occur, it would result in 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 more than 30 events per year resulting in radiation over exposures from radioactive material that exceed applicable regulatory limits.***

**Verification:** Events meeting this threshold would be reported to NRC and/or Agreement States through a number of sources, but primarily through required licensee notifications. Event notifications and preliminary notifications are used to communicate this information internally. For NMSS activities, the NMED is an essential system used to collect information of such events. Overexposures are those exposures that exceed the dose limits specified in 10 CFR 20.2203(a)(2). Multiple people may be affected by a single causal event. For fuel cycle activities, this extends to other hazardous materials used with, or produced from, licensed material, consistent with 10 CFR Part 70. Reportable chemical exposures are those that exceed license commitments, including chemical exposures involving uranium recovery activities under the Uranium Mill Tailings Radiation Control Act.

The fuel cycle and materials inspection programs are key elements in verifying the completeness and accuracy of licensee reports. The IMPEP also provides a mechanism to verify that Agreement States and NRC regions are properly collecting and reporting such events as received from the licensees, and entering them into NMED.

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

**Validation:** Radiation overexposures and reportable chemical exposures collected under this measure may be indicative of licensee programmatic weaknesses that could ultimately compromise public health and safety. The NRC holds periodic meetings, where staff and management validate previously screened events.

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- ***No more than 45 medical events per year.***

**Verification:** Medical events reported under 10 CFR Part 35 are counted under this performance measure. Events meeting this threshold would be reported to NRC and/or Agreement States through a number of sources, but primarily through required licensee notifications. Multiple people may be affected by a single causal event. Event notifications and preliminary notifications are used to communicate this information internally. For NMSS activities, the NMED is an essential system used to collect information of such events. The Materials Inspection program is a key element in verifying the completeness and accuracy of licensee reports. The IMPEP also provides a mechanism to verify that Agreement States and NRC regions are properly collecting and reporting such events as received from the licensees, and entering them into NMED.

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

**Validation:** Medical events can potentially be significant from a health and safety standpoint. The NRC holds periodic meetings, where staff and management validate previously screened events.

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

**Verification:** Releases under the 30-day reporting requirement under 10 CFR 20.2203(a)(3) are counted under this performance measure. Events meeting this threshold would be reported to the NRC and/or Agreement States through a number of sources, but primarily through required licensee notifications. Event notifications and preliminary notifications are often used to communicate this information internally. For NMSS activities, the NMED is an essential system used to collect information of such events.

The materials inspection program is a key element in verifying the completeness and accuracy of licensee reports. The IMPEP also provides a mechanism to verify that Agreement States and NRC regions are properly collecting and reporting such events as received from the licensees, and entering them into NMED.

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

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**Validation:** Releases are tracked in order to ensure protection of the environment. The NRC holds periodic meetings where staff and management validate previously screened events.

- ***No nonradiological events that occur during the NRC-regulated operations that cause impacts on the environment that can not be mitigated within applicable regulatory limits, using reasonably available methods.***

**Verification:** Events meeting this threshold are reported to the NRC and/or Agreement States primarily through required licensee notifications, although other sources may also report events. Morning Reports are used to communicate this information internally, and the reports are entered into the NMED for tracking and evaluation purposes. Any failure to meet this performance target would result in immediate followup by the NRC. Failures to meet performance targets in Agreement States would require followup actions coordinated through the NRC's Office of State and Tribal Programs. Releases that cause impacts to the environment that cannot be mitigated within applicable regulatory limits using reasonably available methods are not readily defined. The expert judgement of NRC personnel and that of other agencies, such as the EPA, is relied upon to make such determinations.

**Validation:** This measure only involves chemical releases from NRC-regulated activities under the Uranium Mill Tailings Radiation Control Act. As such, this measure is limited to nonradiological environmental impacts from operations, including remediation. Note that this measure does not apply to decommissioning of sites under the Nuclear Waste Safety arena. Events reported under this measure are those that could lead to a nonradiological impact on the environment that could not be mitigated within applicable regulatory limits, using reasonably available methods. Examples of events include chemical releases resulting from excursions at in situ leach facilities or releases from mill tailings piles that could contaminate the groundwater. Events of this magnitude would be rare. If such an event were to occur it would result in prompt and thorough investigation.

- ***No more than five substantiated cases per year of attempted malevolent use of source, byproduct, or special nuclear material.***

**Verification:** Malevolent use is defined as the deliberate misuse of radioactive material with the intent to cause physical or psychological harm to a person or persons, or to cause physical damage to a facility or to the environment. The NRC evaluates intentional violations and deliberate acts against this definition, including events involving NRC or Agreement State licensees. Events meeting this threshold are reported to the NRC and/or Agreement States primarily through required licensee notifications, although reports may also be received from other sources (e.g., allegations could be another source for such reports). Event notifications and preliminary notifications are used to communicate this information internally and the reports are entered into the NMED for tracking

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and evaluation purposes. The NRC responds to either a licensee report or an allegation by initiating an independent investigation. The NRC holds periodic meetings, where management and staff validate previously screened events.

**Validation:** Events collected under this performance measure are substantiated cases of attempted malevolent use of source, byproduct, or special nuclear material. Such events could compromise public health and safety, the environment, and the common defense and security.

- ***No breakdowns of physical protection or material control and accounting systems resulting in a vulnerability to radiological sabotage, theft, diversion, or unauthorized enrichment of special nuclear material.***

**Verification:** Events associated with this measure must be recorded within 24 hours of the identified event in a safeguards log maintained by the licensee. The log must be retained 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. A determination of whether a substantiated breakdown has resulted in a vulnerability to radiological sabotage, theft, diversion, or unauthorized enrichment of special nuclear material is made by the NRC. When making substantiated breakdown determinations, the NRC evaluates the materials event data, in order to ensure that licensees are reporting and collecting the proper event data.

**Validation:** 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, in actuality, resulted in a vulnerability.

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### ***Nuclear Waste Safety***

The NRC will conduct an efficient regulatory program to ensure the safe transport, storage, and disposal of radioactive waste that adequately protects public health and safety, and promotes the common defense and security by working to achieve the following strategic goal:

***Strategic Goal:*** Prevent significant adverse impacts from radioactive waste to the current and future public health and safety and the environment, and promote the common defense and security.

#### ***Measures:***

- ***No deaths resulting from acute radiation exposures from radioactive waste.***

***Verification:*** Events meeting this threshold are reported to the NRC and/or Agreement States primarily through required licensee notifications, although other sources may also report events. These events are summarized in event notifications and preliminary notifications, which are used to widely disseminate the information to the appropriate managers and staff. The reports are also entered into the NMED for tracking and evaluation purposes. The decision on whether or not to ascribe the cause of a death to conditions related to acute radiation exposures will be made by NRC or Agreement State technical specialists, or our consultants. The IMPEP provides a mechanism to verify that Agreement States and NRC regions are properly collecting and reporting such events as received from the licensees, and entering them into NMED.

***Validation:*** Determining whether or not any deaths result from acute radiation exposures is valid and fundamentally essential to protecting public health and safety. Events of this magnitude are not expected and would be rare. If such an event were to occur, it would result in prompt and thorough investigation of the event, its consequences, its root causes, and the necessary actions by the licensee and the NRC to mitigate the situation and prevent recurrence.

- ***No events resulting in significant radiation exposures from radioactive waste.***

***Verification:*** Significant exposures are defined as those that result in unintended permanent functional damage to an organ or a physiological system as determined by a physician, as agreed upon by NRC or Agreement State technical specialists, or our consultants. Events meeting this threshold are reported to the NRC and/or Agreement States primarily through required licensee notifications, although other sources may also report events. Event notifications and preliminary notifications are used to communicate this information internally. The reports are also entered into the NMED for tracking and evaluation purposes. The IMPEP provides a mechanism to verify that

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Agreement States and NRC regions are properly collecting and reporting such events as received from the licensees, and entering them into NMED.

**Validation:** Any event resulting in an unintended permanent functional damage to an organ or physiological system compromises public health and safety. Events of this magnitude are not expected and would be rare. If such an event were to occur, it would result in prompt and thorough investigation of the event, its consequences, its root causes, and the necessary actions 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 previously screened events.

- ***No releases of radioactive waste causing an adverse impact on the environment.***

**Verification:** Releases of radioactive waste that have the potential to cause an adverse impact on the environment are currently undefined. Therefore, for this performance measure, releases that exceed the limits for reporting AOs as given in AO criteria 1.B.1 are counted as releases that cause an adverse impact on the environment. Events meeting this threshold are reported to the NRC and/or Agreement States primarily through required licensee notifications, although other sources may also report events. Event notifications and preliminary notifications are used to communicate this information internally. The reports are also entered into the NMED for tracking and evaluation purposes. The IMPEP provides a mechanism to verify that Agreement States and NRC regions are properly collecting and reporting such events as received from the licensees, and entering them into NMED.

**Validation:** The events reported under this measure are those that threaten the environment. Events of this magnitude are rare. If such an event were to occur, it would result in prompt and thorough investigation of the event, its consequences, its root causes, and the necessary actions by the licensee and NRC to mitigate the situation and prevent recurrence. In addition to these immediate actions, the NRC holds periodic meetings, where staff and management validate previously screened events.

- ***No losses, thefts, diversions, or radiological sabotages of special nuclear material or radioactive waste.***

**Verification:** Licensees report events that entail losses, thefts, diversions, or radiological sabotages of special nuclear material or radioactive waste within 1 hour of their occurrence to the NRC Headquarters Operations Center. Licensees are also required to submit to the NRC a followup written report within 30 days of the event. Such reports must include sufficient information for NRC analysis and evaluation. The NRC also initiates an independent investigation of the reported event,



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and events are entered and tracked by the NMED. Any strategic plan failure results in immediate investigation and followup, and is tracked in the Safeguards Summary Event List Database.

Any lack of appropriate licensee reporting would be discovered through the routine inspection program. The NRC also holds periodic meetings, where staff and management validate previously screened events.

**Validation:** This measure only applies to *actual* losses, thefts, diversions, or *actual* radiological sabotage. *Attempts* to steal, divert, or conduct sabotage using special nuclear material or radioactive waste are covered by a parallel measure at the performance goal level. Such events could compromise public health and safety, the environment, and the common defense and security.

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

**Measures:**

- ***No events resulting in radiation overexposures from radioactive waste that exceed applicable regulatory limits.***

**Verification:** Radiation overexposures are counted as those exposures that exceed the dose limits provided by 10 CFR 20.2203(a)(2). Events meeting this threshold are reported to the NRC and/or Agreement States primarily through required licensee notifications, although other sources may also report events. Event notifications and preliminary notifications are used to communicate this information internally and the reports are entered into the NMED for tracking and evaluation purposes. The IMPEP provides a mechanism to verify that Agreement States and NRC regions are properly collecting and reporting such events as received from the licensees, and entering them into NMED. In FY 2001, a working group analyzed the event reporting process within the NRC and with the States. Their efforts will also serve to improve the data collection process for the metrics used in this arena.

**Validation:** Radiation overexposures collected under this measure may be indicative of programmatic weaknesses that could ultimately compromise public health and safety. The NRC also holds periodic meetings, where staff and management validate previously screened events.

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- ***No breakdowns of physical protection resulting in a vulnerability to radiological sabotage, theft, diversion, or loss of special nuclear materials or radioactive waste.***

**Verification:** Breakdowns of physical protection resulting in a vulnerability to radiological sabotage, theft, diversion, or loss of special nuclear materials or radioactive waste are recorded within 24 hours in a safeguards log maintained by the licensee. The log must be retained as a record for 3 years after the last entry is made or until termination of the license. No explicit reporting requirements exist for substantiated breakdowns of physical protection. The NRC relies on its safeguards inspection program to ensure the reliability of recorded data. The NRC uses the inspection program information to determine whether a breakdown of physical protection has occurred. The NRC evaluates the event data when making a determination whether a breakdown of physical protection has occurred in order to ensure that licensees are reporting and collecting the proper event data.

**Validation:** 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, in actuality, resulted in a vulnerability.

- ***No radiological releases to the environment from operational activities that exceed the regulatory limits.***

**Verification:** Radiological releases to the environment from operational activities that exceed the regulatory limits are required to be reported within 30 days under 10 CFR 20.2203(a)(3). Events meeting this threshold are reported to the NRC and/or Agreement States primarily through required licensee notifications, although other sources may also report events. Event notifications and preliminary notifications are used to communicate this information internally, and the reports are entered into the NMED for tracking and evaluation purposes. The IMPEP provides a mechanism to verify that Agreement States and NRC regions are properly collecting and reporting such events as received from the licensees, and entering them into NMED. In FY 2001, a working group analyzed the event reporting process within the NRC and with the States. Their efforts will also serve to improve the data collection process for the metrics used in this arena.

**Validation:** Releases are tracked in order to ensure protection of the environment. The NRC also holds periodic meetings, where staff and management validate previously screened events.

### **APPENDIX III: VERIFICATION AND VALIDATION OF NRC MEASURES AND METRICS**

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- *No instances where radioactive waste and materials under the NRC's regulatory jurisdiction cannot be handled, transported, stored, or disposed of safely now or in the future.*

**Verification:** In the Nuclear Waste Safety arena, as with the Nuclear Materials Safety arena, reporting of events under the NRC's existing regulations is the primary method for determining whether the performance measure has been met. Handling, storage, transportation, and disposal are subject to NRC regulations and licensing. Reported events are entered into NMED and available for examination to determine whether there have been any instances where waste was not handled safely. In coordination with the Department of Transportation, the NRC monitors reports and events that could affect the safe transportation of materials and wastes.

For the disposal of waste, additional verification and validation for future performance is required, since releases of radioactive materials in the future could occur for a facility with a terminated license (i.e., there would be no licensee to file reports to the NRC or an Agreement State for reportable events). At the present time, all of the commercial low-level radioactive waste disposal sites in the United States are licensed by Agreement States (Utah, South Carolina, and Washington). The NRC's IMPEP reviews (administered in the Nuclear Materials Safety arena) ensure that the States have adequate and compatible programs for disposal of radioactive wastes, including (and especially) their ability to ensure that waste will be safely isolated in the future. NRC and Agreement State regulations address future performance of disposal facilities, and the NRC has published guidance on how to assess such performance. In a few cases, the NRC specifically authorizes other disposals in, for example, conventional landfills or hazardous waste facilities, in accordance with agency regulations.

**Validation:** Events collected under this performance measure are actual occurrences of releases in excess of regulatory limits for reportable events, for the licensed activities of handling, storage, transportation, and disposal. Such events could compromise public health and safety, the environment, and the common defense and security. Events of this magnitude are not anticipated. If such an event were to occur, it would result in prompt and thorough investigation, including consequences, root causes, and necessary actions by the licensee and NRC to mitigate the consequences and prevent recurrence. For the disposal of radioactive material, involving future performance of a facility that is no longer under an NRC or Agreement State license, ensuring that the NRC and Agreement States have used appropriate licensing procedures, during present day licensing oversight, will adequately protect public health and safety and the environment in the future.

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#### ***International Nuclear Safety Support***

The NRC will conduct activities that encompass international nuclear policy formulation, export-import licensing for nuclear materials and equipment, treaty implementation, nuclear proliferation deterrence, international safety assistance, and safeguards support and assistance by working to achieve the following strategic goal:

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

#### ***Measures:***

- ***Fulfills 100 percent of the significant obligations over which the NRC has regulatory authority arising from statutes, treaties, conventions, and Agreements for Cooperation.***

***Verification:*** At the beginning of the fiscal year, the NRC prepares a list of its significant obligations. This list is coordinated with the NRC International Council (IC) and forwarded to the Commission for review and comment. The NRC monitors activities it undertakes during the year in regard to these obligations. A year-end status report is forwarded to the Department of State (DOS) Office of Nuclear Energy Affairs for its information and as a means of external confirmation.

***Validation:*** The obligations to be tracked are those that, if unfulfilled, could undermine U.S. interests in the safe and secure use of nuclear materials and in nuclear nonproliferation. The circumstances surrounding any such failures of the NRC, as well as their implications and recovery plans, are reported to the Commission and separately described in reports to DOS or the International Atomic Energy Agency (IAEA), confirming their national and international significance.

**The following representative examples illustrate significant obligations over which the NRC has regulatory authority arising from statutes, treaties, conventions, and Agreements for Cooperation.**

**Nuclear Non-Proliferation Treaty [1969] and the U.S. Nuclear Non-Proliferation Act [1978].** NRC is obliged to carry out procedures to facilitate the timely processing of requests for export licenses in order to enhance the reliability of the United States in meeting its commitments to supply nuclear reactors and fuel to countries that adhere to effective nonproliferation policies. The NRC is also obliged to provide timely views to the Executive Branch when consulted regarding proposed Agreements for Cooperation in the Peaceful Uses of Nuclear Energy, as well as subsequent arrangements and transfers of nuclear technology.

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Convention on Early Notification of a Nuclear Accident [1986]. The U.S. Government is obliged to report to the IAEA and affected countries any U.S. nuclear accidents that have the potential for international transboundary release of radioactive material that could be of safety significance to another country. In that context, the NRC must report such accidents within its purview to Executive Branch contacts, following established U.S. Government procedures.

Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency [1987]. The U.S. Government is obliged to cooperate in order to facilitate prompt assistance and support in the event of nuclear accidents or radiological emergencies. The U.S. Government is also required to notify the IAEA of its available experts, equipment, and other materials for providing assistance and deciding whether it can render requested assistance and on what terms. In that context, the NRC must advise Executive Branch contacts of its assistance capabilities, following established U.S. Government procedures.

Convention on the Physical Protection of Nuclear Material [1987]. The NRC is obliged to require U.S. licensees to meet mandatory criteria for the physical protection of nuclear material during international transport.

Convention on Nuclear Safety (CNS) [1996]. The NRC is obliged to take regulatory and administrative measures to implement obligations under the CNS as they apply to NRC-licensed nuclear facilities, including provisions for reporting, existing nuclear installations, legislative and regulatory framework, regulatory body, responsibility of the license holder, priority to safety, financial and human resources, human factors, quality assurance, assessment and verification of safety, and radiation. Significant obligations of the CNS which may require NRC actions beyond those inherent in our domestic regulatory program, are in the areas of reporting, emergency preparedness and siting, as follows.

- **Reporting:** The NRC has the lead responsibility within the U.S. Government to prepare, prior to each meeting of the Parties, a report on the measures taken to implement each of the obligations of the Convention.
- **Emergency Response:** The NRC must ensure that the competent authorities of Canada and Mexico are provided with appropriate information for emergency planning and response for any licensed nuclear facilities in their vicinities.
- **Siting:** The NRC must ensure that appropriate procedures are established and implemented for consulting the competent authorities of other Parties to the Convention in the vicinity of a proposed nuclear installation, insofar as they are likely to be affected by that installation and, upon request, providing the necessary information in order to enable them to evaluate

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and make their own assessment of the likely safety impact on their own territory of the nuclear installation.

The Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management [Opened for Signature, 1997]. When this Convention is ratified by the United States and comes into force, the NRC will be obliged to take certain regulatory and administrative measures to implement its provisions. These obligations are comparable to those described above for the CNS, with the exception that the NRC would support, rather than lead, preparation of the U.S. reports.

- *No significant proliferation incidents attributable to some failure of the NRC.*

**Verification:** The NRC monitors State Department and Central Intelligence Agency reports, as well as newspapers, nuclear journals, and other open sources of information, for reports of significant proliferation incidents. Such incidents would include: the detonation of a nuclear explosive device by any country other than the United States, United Kingdom, Russia, France, or China; refusal by any non-nuclear weapon state with which the United States has an Agreement for Cooperation to accept IAEA safeguards on all its nuclear activities; refusal by any such country to give specific assurances that it will not manufacture or otherwise acquire any nuclear explosive device; engagement of any such country in activities involving source or special nuclear material and having direct significance for the manufacture or acquisition of nuclear explosive devices; or the theft or diversion from authorized peaceful use by any country, sub-national group or individual of 1 kilogram or more of U.S.-supplied or obligated highly enriched uranium or plutonium-239.

The NRC prepares an analysis of any reported significant incidents to determine whether some failure of the NRC contributed to its occurrence. This information is reported to the IC and, as appropriate, to the Commission.

**Validation:** The proliferation incidents of interest are those of such significance that they would be reported to the Congress by DOS. The NRC would necessarily consider whether the incident was abetted by some action or inaction on its part. If so, the incident would represent an NRC performance failure.

- *No significant safety or safeguards events that result from the NRC's failure to implement its international commitments.*

**Verification:** Significant safety events are those events that are rated 2 or above on the International Nuclear Events Scale (INES). Significant safeguards events are those events that are judged by the IAEA Director General and staff to require notification to the IAEA Board of Governors. The NRC

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monitors INES reports and IAEA Board of Governors documents to identify any and all significant events during the fiscal year.

The NRC staff specialists prepare a quick-look analysis of each significant event to determine whether some failure of the NRC may have materially contributed to its occurrence. This information is promptly reported to the IC and, as appropriate, to the Commission.

*Validation:* Significant safety and safeguards events usually raise questions from Congressional oversight committees and the trade press, if not the major news media. The NRC would necessarily consider whether the incident was abetted by some action or inaction on its part. If so, the incident would represent an NRC performance failure.

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### **SECTION 2**

#### **Nonsafety-related Strategic and Performance Goals**

*Unless specifically noted, the Verification and Validation for the Nonsafety measures apply equally to the Nuclear Reactor Safety, Nuclear Materials Safety, and Nuclear Waste Safety arenas.*

**Performance Goal:** Increase public confidence.

- *Complete the milestones in the annual performance plan relating to collecting, analyzing, and trending information for measuring public confidence.*

**Verification:** On September 5, 2000, Dr. William D. Travers, the NRC's Executive Director for Operations, issued a memorandum regarding the use of a public meeting feedback form to assess the effectiveness of the agency's communications plans (CPs) and interactions with the public. This memorandum directed the NRC staff to begin using the form on October 1, 2000, for an 18-month pilot. The memorandum further directed the staff to introduce and distribute the feedback form to attendees at the start of public meetings where the NRC is the main presenter, and at select meetings between the NRC and a licensee, where the public attends as observers but does not participate (e.g., enforcement conferences). Meeting attendees can submit the completed forms at the end of the meeting or mail the forms to the designated NRC meeting contact following the meeting.

Following each public meeting, the meeting contact collects and reviews the completed forms. Improvements resulting from feedback comments will be tracked in the office operating plan and communications plan for future meetings. Additionally, the completed feedback forms, along with any prepared meeting summary and staff comments or observations, are forwarded to the Office of the Deputy Executive Director for Management Services. That office performs a semiannual evaluation of the forwarded information in an effort to identify any generic areas for improving NRC staff communications at public meetings.

**Validation:** The feedback form is a qualitative method for collecting the information that will be analyzed as a measure of public confidence. This information provides the NRC with a mechanism to identify any generic areas for improving NRC staff communications at public meetings.



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- ***Complete all of the public outreaches as scheduled in the annual performance plan.***

**Verification:** On May 1, 2000, Dr. Travers, issued a memorandum regarding initiatives to improve the effectiveness of agency communications. This memorandum directed the staff to develop CPs for important programs supporting each arena. The structure of the CPs, developed to reflect the importance of building and maintaining public trust, includes establishing goals, discussing the history of the effort, identifying internal and external audiences, identifying the tools that would best fit each audience, identifying key messages, determining the schedule for actions and evaluation criteria, identifying how to measure progress and obtain feedback, and determining how results will be reported and with whom the results will be shared.

In his memorandum dated May 1, 2000, the EDO also assigned regional administrators and office directors to incorporate CP milestones and important implementation activities into the office operating plans. For the annual performance plan, specific milestones from the six high-priority CPs have been identified.

**Validation:** The milestones identified for the performance plan were endorsed by the EDO and the applicable office director. The milestones for the public outreach initiatives will be reviewed at operating plan briefings with the EDO and revised as appropriate to ensure that the public outreach efforts discussed in the communication plans still constitute a valid and effective means to increase public confidence.

- ***Issue Director's Decisions for petitions filed to modify, suspend, or revoke a license under 10 CFR 2.206 within an average of 120 days.***

**Verification:** 10 CFR 2.206 give individuals an opportunity to file a request to institute a proceeding to modify, suspend, or revoke a license, or for any other action as may be proper. NRC Management Directive (MD) 8.11 provides the procedures for handling and resolving such petitions filed under 10 CFR 2.206. This measure tracks the staff's timeliness in reaching proposed Director's Decisions to address such petitions.

The metric begins with the date the acknowledgment letter is sent to the petitioner (following the Petition Review Board) and ends on the date the proposed Director's Decision is sent out for comment. This information is reported to the EDO. Supplements to the petition that require extension of the schedule will reset the beginning of the metric to the date of issuance of a new acknowledgment letter. Petition Review Boards will determine whether such submissions meet the conditions of a 10 CFR 2.206 petition, as outlined in MD 8.11.

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**Validation:** Timely assessment, review, and agency response to a proposed 10 CFR 2.206 petition is important to the agency's ability to maintain public confidence. The criteria established by MD 8.11 ensure that proposed petitions are appropriately assessed, provided with the appropriate management oversight, and reviewed and responded to in a timely manner.

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

- ***Complete those specific milestones in the Risk-Informed Regulation Implementation Plan (RIRIP) identified for completion in the annual performance plan.***

**Verification:** In developing the RIRIP, milestones to be included in the performance plan will be identified by arena. The NRC's Office of Nuclear Regulatory Research will coordinate semiannual updates of the RIRIP, which will document the status of these milestones.

**Validation:** The RIRIP replaces the Probabilistic Risk Assessment Implementation Plan. It is to be a comprehensive report on the agency's risk-informed plans and activities, organized by arena.

- ***Complete at least two key process improvements per year in selected program and support areas that increase efficiency, effectiveness, and realism.***

#### **Verification and Validation for the Nuclear Reactor Safety Arena**

**Verification:** Annually, as part of the planning phase of the planning, budgeting, and performance management (PBPM) cycle, the Office of Nuclear Reactor Regulation (NRR) Leadership Team (LT) evaluates their activities to determine whether any processes might be conducted more efficiently or effectively and, thus, merit a process improvement initiative. The LT prioritizes the candidate activities based on their potential contribution to achieving greater efficiency and/or effectiveness. Resources to accomplish the identified process improvement initiative, as well as any anticipated resource savings, are considered during the PBPM planning and budgeting phases. The LT identifies the proposed process improvements to the NRR Executive Team (ET) as part of its budget recommendation.

Progress of the process improvement initiative is tracked throughout the year in monthly leadership-level reports and quarterly arena-based executive-level reports. Upon completion of all of the milestones, a brief report will be developed describing the results.

**Validation:** In most cases, the process improvement is considered complete at the time a report is issued. Process improvements are a fundamental method to make NRC activities more efficient, effective, and realistic.

### **APPENDIX III: VERIFICATION AND VALIDATION OF NRC MEASURES AND METRICS**

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#### ***Verification and Validation for the Nuclear Materials Safety and Nuclear Waste Safety Arenas***

**Verification:** Annually, as part of the budget development cycle, each NMSS division evaluates its activities to determine whether any areas might be conducted more efficiently or effectively and, thus, merit a process review. In doing so, each NMSS division prioritizes the candidate efforts based on their potential contribution to achieving greater efficiency and/or effectiveness in the conduct of NMSS activities. Resources estimates to accomplish the effort(s) are considered during the planning and budgeting process.

In developing their operating plans for the upcoming fiscal year, each NMSS organization identifies the process improvement efforts planned for that year, including the intermediate milestones that have been established as being necessary to complete the effort. Nonetheless, "fact-of-life changes" in NMSS programs may dictate that newly identified process improvements should be given higher priority than those planned during the planning and budget cycle for a given fiscal year, and may replace those previously planned. An unanticipated need for a process improvement review may also be identified during the operating year. In such cases, the prioritization scheme developed in connection with the PBPM process is used to make workload decisions. The NMSS Office Director reviews the proposed process improvements as part of his review of the baseline operating plans for the new fiscal year and as unanticipated reviews are identified outside of the planning, budget, and operating plan development phases, and uses the PBPM prioritization as a guide for decisionmaking.

The progress of the process improvement reviews is tracked in the operating plans. A general description of the process improvement is included in the arena-based leadership-level operating plan, and a more detailed description of the milestones leading to completion of the effort is contained in the operational-level operating plans. These operating plans are updated to reflect the current status at the end of each quarter of the fiscal year. The updated operating plans are presented to the NMSS Office Director and/or Deputy Director each quarter, and the office-approved updates are provided to the EDO each quarter.

A process improvement effort that spans both the Nuclear Materials Safety and the Nuclear Waste Safety arenas is counted in each arena.

**Validation:** In most cases, the process improvement is considered complete at the time the staff issues its report, or briefs senior NRC management on the findings and recommendations (not including interim status briefings). Ensuing implementation efforts are tracked as part of the operating plan process, but those efforts are outside the scope of this measure.

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- ***Complete all license renewal application reviews within 30 months of receipt if a hearing is held, within 22 months without a hearing beginning in FY 2003 (25 months without a hearing prior to FY 2003).***

**This performance measure applies only to the Nuclear Reactor Safety arena.**

**Verification:** Upon receiving a license renewal application for review, the staff opens a TAC number for the licensing action in NRR's automated TRIM with a 30-month target completion date. The TAC number is used to report staff hours charged in reviewing the application and documenting completion of the review. The TAC number and its 30-month completion date are maintained in TRIM for the duration of the renewal application review if a hearing is held. If a hearing is not held, the target completion date in TRIM is revised to 22 months after receipt for renewal reviews to be completed in FY 2003 and beyond. )Prior to FY 2003, the target completion date for applications without a hearing was 25 months after receipt.)

Compliance with the established schedule is monitored by the assigned Project Manager and the License Renewal Program Director or his designee throughout the review of the license renewal application. TRIM reports compliance with the measure either by accessing the individual TAC or through the TRIM Project Manager's Report.

**Validation:** The TRIM system provides a readily accessible reporting system that clearly demonstrates whether the NRC meets its 30-month measure.

- ***Complete all major prelicensing milestones needed to prepare for a licensing review of the potential Yucca Mountain repository, consistent with the Department of Energy's (DOE's) schedules and before DOE submits its license application.***

**This performance measure applies only to the Nuclear Waste Safety arena.**

**Verification:** The NRC will complete all of the milestones listed for this measure in the FY 2003 Performance Plan before DOE's submittal of its proposed license application in FY 2004. The milestones and schedules, and changes thereto, are tracked by NMSS.

**Validation:** The milestones will provide guidance to DOE in preparing its proposed application and guidance to the NRC's review of DOE's proposed application, thereby making the licensing process more effective and efficient.

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***Performance Goal:*** Reduce unnecessary regulatory burden on stakeholders.

- ***Complete those specific milestones to reduce unnecessary regulatory burden as identified in the annual performance plan.***

#### **Verification and Validation for the Nuclear Reactor Safety Arena**

***Verification:*** The specific items to be included within the initiative described in SECY-02-081 will be assessed and adjusted as staff activities progress and stakeholder input is received and evaluated. Verification of these milestones will be accomplished by determining that the identified actions or products have been completed. The status of the initiative and specific milestone completion will be described in periodic reports to the Commission.

The milestone schedule for FY 2004 includes completing the limited-scope, short-term initiative described in SECY-02-081, including issuing the associated rulemakings.

***Validation:*** Performance can be validated by timely completion of milestones, such as the issuance of final rulemakings or other products that address items included in the limited-scope, short-term initiative described in SECY-02-081. Validation that the actions achieve the goal of reducing unnecessary regulatory burden will be achieved through interactions with stakeholders. In some cases, such as items involving rulemaking, the associated processes include steps to validate the regulatory analyses of the proposed actions.

#### **Verification and Validation for the Nuclear Material Safety Arena**

***Verification:*** NMSS is currently developing a plan to reduce unnecessary burden. This measure will be implemented in the context of active projects. The FY 2003 Performance Plan specifies that one rulemaking primarily designed to reduce unnecessary regulatory burden will be completed each year in FY 2002 and FY 2003.

***Validation:*** Plans for validation of this measure will be included as part of the development of the plan to reduce unnecessary burden.

#### **Verification and Validation for the Nuclear Waste Safety Arena**

***Verification:*** In an effort to reduce unnecessary regulatory burden, the NRC routinely seeks input from licensees and other external stakeholders on revisions to the agency's regulatory framework. This measure tracks instances where the NRC may have overlooked a potential unnecessary regulatory burden associated with implementation of modification or application of the regulatory

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framework for the Nuclear Waste Safety arena during the reporting period. Licensees or other external stakeholders may inform the NRC of a potential regulatory burden in writing or via email, or may present a potential unnecessary regulatory burden issue to the Commission during transcribed meetings. Progress on the implementation of NRC action is reflected, reviewed, and monitored on a monthly basis in the NMSS division's operational-level operating plan. Any deviations are reported to the Director and Deputy Director of the responsible division.

**FY 2003 Performance Plan Activity: Adoption and Implementation of Standard Technical Specifications (STS) for Spent Fuel Dry Storage Cask Designs.**

*Milestones: FY 2003:* If an application to adopt the STS for a specific cask design is received, the staff will begin a complete review of the application.

*FY 2004:* If an application for STS adoption is approved, the staff will complete rulemaking to approve STS adoption for the specific cask design.

*Verification:* If a vendor or licensee adopts the STS for a cask design, it would be valuable to track the number of 10 CFR 72.48 evaluations supporting cask design changes that would be implemented over a 1-year period after the STS is in place. This would help to determine the potential cost savings a vendor or licensee could realize because of not having to process the cask design changes via NRC approval of license amendments.

*Validation:* For subsequent cask users who adopt the STS approved for the first vendor or licensee, the number of 10 CFR 72.48 evaluations following STS adoption could be tracked to verify that the regulatory burden has been reduced to a similar extent.

- *Reduce paperwork and recordkeeping imposed by the NRC on its licensees by at least 25 percent over a period of 5 years.*

**This performance measure applies only to the Nuclear Materials Safety arena.**

*Verification:* This measure excludes Agreement States and pertains only to NRC materials and fuel cycle activities. As program changes occur (new/revised regulations, new forms, changes in licensing practices, etc.), their impacts will be tracked in terms of the paperwork and recordkeeping burdens for the affected class of licensees.

A baseline is being established using the current recordkeeping and paperwork burden estimates approved under the Paperwork Reduction Act. As program changes occur, a comparison calculation will determine the percentage change and its significance. This means that a change affecting 2,000 licensees will count more significantly than a similar change affecting a smaller number of licensees.

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*Validation:* The validity of this new measure has not been tested. During the course of implementation, NMSS may find it necessary to redefine or refocus this measure to provide a more meaningful measure against which to evaluate the reduction of unnecessary burden.

## **APPENDIX IV**

# **MANAGEMENT CHALLENGES**



## **APPENDIX IV MANAGEMENT CHALLENGES**

### **INTRODUCTION**

This appendix lists the nine most serious management and performance challenges facing the agency identified by NRC's Office of the Inspector General in a memorandum dated November 18, 2002. This appendix also describes the actions/milestones being taken by NRC to address these challenges. Senior management continues to address most of these challenges through the strategic planning process.

The management challenge described as "Protection of Information" was the latest challenge added to the list. NRC is currently analyzing this challenge and will identify actions/milestones and schedules in the FY 2005 Performance Plan.

## **APPENDIX IV: MANAGEMENT CHALLENGES**

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### **OIG MANAGEMENT CHALLENGES**

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

The NRC is currently reviewing the agency's strategic plan to determine whether our goals, strategies, and measures adequately address the actions that we now consider necessary as a result of the terrorist attacks on September 11, 2001. During FY 2002, the NRC staff conducted extensive effort and made significant enhancements to the security of civilian nuclear facilities and materials.

<i><b>Actions/Milestones</b></i>	<i><b>Schedule</b></i>
<p><b>NUCLEAR REACTOR SAFETY ARENA</b></p> <p>The NRC is re-analyzing the vulnerabilities and physical protection requirements for NRC-licensed facilities. Representative nuclear power plant structures will also be analyzed to determine their vulnerability to aircraft attack. Toward that end, the NRC will conduct an integrated assessment of the effects of various attack scenarios. Research products will provide data to assist decisionmakers in developing mitigation strategies and allocating future resources.</p> <p><b>Status:</b> The staff is pursuing a number of additional efforts related to generic issues to support the vulnerability assessments. Specifically, these efforts include aircraft impact vulnerability analysis, cyber threat analysis, research on terrorist attack scenarios, affects 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, characterization of insider threats, and continued effort on the Enhanced Terrorist Response (ETR) Project.</p> <p>The staff also expects to revise the design-basis threat (DBT) in mid-FY 2003, aircraft vulnerability assessment in FY 2003; and Commission papers on power reactor vulnerabilities, research and test reactor vulnerabilities, and spent fuel pool vulnerabilities in FY 2003–FY 2004. Regulatory actions that result from these assessments will follow.</p>	<p>FY 2002–FY 2004</p>

#### APPENDIX IV: MANAGEMENT CHALLENGES

<i><b>Actions/Milestones</b></i>	<i><b>Schedule</b></i>
<p>The NRC plans to re-analyze the processes used to authorize access to licensed facilities. Activities will include evaluating and improving the adequacy and robustness of existing access authorizations, determining the feasibility of integrating a national security check program, and determining the feasibility of obtaining overseas criminal history checks.</p> <p><b>Status:</b> Interim compensatory measures for access authorization/insider are planned for early FY 2003. The NRC continues to consult and coordinate with other Federal agencies to enhance access authorization.</p>	FY 2002–FY 2003
<p>The NRC will re-assess its emergency preparedness activities and response capabilities. Activities will include evaluating the NRC's response capabilities to respond to multiple events, including mobilizing and responding to a national threat; evaluating regulatory requirements for emergency preparedness programs; increasing coordination with stakeholders related to emergency preparedness and response; evaluating the adequacy of policy and programs for public protective actions; developing inspection guidance on licensees' integration of security and emergency plans to assess licensees' capabilities to respond to attacks; and enhancing intelligence community communications.</p> <p><b>Status:</b> The reassessment of emergency preparedness activities and response capabilities includes a review of incident response operations, which will be completed in early FY 2003; implementation of the Homeland Security Advisory System (HSAS), which was completed in the last quarter of FY 2002; a revised Continuity of Operations (COOP) plan, which is scheduled for mid-FY 2003; development of response protocols with Federal and State agencies; completion of OCIMS requirements assessments; completion of DMS system test; and completion of the Incident Response Program Review.</p>	FY 2002–FY 2003

## APPENDIX IV: MANAGEMENT CHALLENGES

<i>Actions/Milestones</i>	<i>Schedule</i>
<p>The NRC will conduct a comprehensive reassessment to evaluate the policies and procedures related to the protection of the agency's critical infrastructure at headquarters, regional offices, and resident inspector offices. This will include evaluating the adequacy of contingency plans to maintain continuity of operations (COOP) during terrorist events that are capable of disrupting response activities, as well as the agency's emergency response planning, staffing, and training for handling protracted events at multiple locations as a result of terrorist activities.</p> <p><b>Status:</b> The staff completed a comprehensive physical security assessment of the NRC's infrastructure in FY 2002, and has implemented most of the recommendations from this assessment. The staff will complete an additional assessment of the physical security of the NRC headquarters facilities in the second quarter of FY 2003. Efforts during FY 2002 also resulted in consolidation of the Office of Nuclear Security and Incident Response on the fourth floor of Two White Flint North, modification of the Operations Center, upgrades to the COOP site, and supplemental staffing arrangements and contingency planning.</p>	FY 2002–FY 2003
<p><b>NUCLEAR MATERIALS SAFETY ARENA</b></p> <p>The NRC will continue to re-analyze its threat assessment framework and design-basis threats, which are used to design safeguards systems to protect against acts of radiological sabotage and to prevent the theft of special nuclear material. The NRC will also increase its interactions with other Federal agencies to ensure coordination of national infrastructure decisions that may impact activities in this area.</p> <p><b>Status:</b> The NRC is reviewing preliminary changes to the DBT for power reactors and Category 1 fuel facilities and identifying threat characteristics for other facilities and activities in coordination with other Federal agencies. The DBT revisions should be completed by mid-FY 2003. The NRC is also continuing its actions to enhance its liaison activities with Federal agencies and other stakeholders in order to ensure timely coordination of decisionmaking regarding threats to nuclear facilities, activities, and the critical infrastructure.</p>	FY 2002–FY 2003

## APPENDIX IV: MANAGEMENT CHALLENGES

<i>Actions/Milestones</i>	<i>Schedule</i>
<p>The NRC will continue to re-analyze the vulnerabilities and physical protection requirements for NRC-licensed facilities. Activities include re-examining the agency's statutory and regulatory requirements and guidance on physical protection for facilities, evaluation of the need for physical protection requirements at NRC-licensed facilities currently not covered by existing physical protection regulations, and examination of the need for physical protection against chemical and/or industrial sabotage at NRC-licensed facilities.</p> <p><b>Status:</b> Preliminary vulnerability assessments to support ICM development for materials licensees will be complete in early FY 2003. Other vulnerability assessments pertaining to materials licensees will be completed in stages through FY 2003 and FY 2004.</p>	FY 2002–FY 2004
<p>The NRC will also work with other Federal agencies (such as the Department of Homeland Security, Federal Bureau of Investigation, Federal Emergency Management Agency) and States to enhance and coordinate U.S. preparedness for terrorist actions against NRC-regulated facilities and activities.</p> <p><b>Status:</b> In FY 2002, the NRC worked with many Federal agencies to coordinate a national response to terrorist actions, and completed its implementation of the Homeland Security Advisory System. In FY 2003, the NRC will continue to enhance preparedness with Federal and State agencies, including improving its coordination with the Department of Homeland Security, law enforcement agencies, and the intelligence community.</p>	FY 2002–FY 2003
<p><b>NUCLEAR WASTE SAFETY ARENA</b></p> <p>The NRC will re-analyze the vulnerabilities and physical protection requirements for NRC-licensed facilities (such as spent fuel storage installations) and transportation of special nuclear material, spent fuel, high-level waste, and byproduct material. The staff will also conduct an assessment of the ability of spent fuel storage casks and radioactive material transportation packages to withstand various attack scenarios. In addition, the agency will reassess its capabilities for first response, independent assessment, and oversight of incidents at licensee facilities.</p> <p><b>Status:</b> The staff continues to assess potential vulnerabilities associated with sabotage and nuclear waste. The staff is currently using the early results of this work to identify and require necessary enhancements to security measures for spent fuel storage and transportation and materials licensees. The staff expects to complete its implementation of interim enhancements by mid-FY 2003. The Commission paper on spent fuel pool vulnerability is tentatively scheduled for June 2004.</p>	FY 2002–FY 2004

## APPENDIX IV: MANAGEMENT CHALLENGES

<i>Actions/Milestones</i>	<i>Schedule</i>
<p><b>NUCLEAR MATERIALS SAFETY AND NUCLEAR WASTE SAFETY ARENAS</b></p> <p>The Office of Nuclear Materials Safety and Safeguards (NMSS) will conduct or support the following efforts:</p> <ul style="list-style-type: none"><li>• Continue the studies of the consequences from potential terrorist attacks to selected transportation packages (non-spent fuel and spent fuel) and selected spent-fuel transportation and spent-fuel storage casks, and the consequences of an irradiator explosion.</li><li>• Continue to support the comprehensive safeguards and security vulnerability assessments of fuel cycle and materials licensees, spent-fuel and non-spent fuel transportation packages, and spent fuel storage casks.</li><li>• Issue regulatory improvements to address any significant weaknesses identified during the vulnerability assessments.</li><li>• Review facility security plans to ensure that the facilities protect against identified threats.</li><li>• Require remaining materials licensees to implement appropriate compensatory measures. Review licensee compliance with the interim compensatory measures; assess proposals to revise regulatory requirements (e.g., rulemaking, orders) and guidance (e.g., information notices, NUREGs) in the area of security.</li><li>• The Interim Compensatory Measure (ICM) Tracking system is being developed to track the implementation of ICMs within NMSS' area of responsibility. The system will allow information on ICMs to be entered into a database and will provide reports (data relating to the NRC orders requiring implementation of ICMs) for managers and staff use.</li><li>• Continue to participate in the interagency and international efforts to address life-cycle management of radioactive sources.</li></ul>	<p>FY 2003–FY 2004</p>

## APPENDIX IV: MANAGEMENT CHALLENGES

**CHALLENGE 2:** Development and implementation of an appropriate risk-informed and performance-based regulatory oversight approach. (GAO identified a comparable challenge.)

<i>Actions/Milestones</i>	<i>Schedule</i>
<p><b>NUCLEAR REACTOR SAFETY ARENA</b></p> <p>Publish report on lessons learned from implementation of the reactor oversight process.</p> <p>Status: The staff last issued this report via SECY-02-0062, dated April 3, 2002. The staff plans to continue to perform annual self-assessments and report the results to the Commission.</p>	<p>FY 2003</p>
<p>Propose feasibility of changes to 10 CFR 50.46.</p> <p>Status: The staff is currently evaluating potential risk-informed changes to the requirements for analysis of design-basis loss-of-coolant accidents (LOCAs) contained in 10 CFR 50.46. These requirements specify the assumptions, methods, and acceptance criteria for use in evaluating the adequacy of the emergency core cooling system (ECCS) for design basis LOCAs. The development of a risk-informed approach to 10 CFR 50.46 has the potential to significantly reduce regulatory burden and improve the effectiveness or regulatory oversight related to ECCS performance, while maintaining safety. In July 2002, the staff completed the technical work to assess the practicality of possible rulemaking associated with the technical requirements of 10 CFR 50.46, Appendix K to 10 CFR Part 50, and General Design Criterion (GDC) 35.</p> <p>Results from the staff's technical work indicate that it is feasible to promulgate a voluntary alternative to the ECCS acceptance criteria specified in 10 CFR 50.46, as well as a voluntary alternative to the ECCS evaluation model requirements specified in 10 CFR 50.46 and Appendix K to 10 CFR Part 50. The NRC communicated these findings to the public through a number of public meetings. The nuclear industry generally agreed with the staff's findings; however, some stakeholders have voiced concerns about the economic feasibility of developing and implementing an alternative ECCS rule.</p> <p>Results from the staff technical work also indicate that it is feasible to promulgate a voluntary alternative to GDC 35, which would allow elimination of the ECCS design requirement for an assumed loss of offsite power (LOOP) coincident with large, and possibly medium, LOCAs. The staff has recently shared these findings and solicited stakeholder feedback in a public meeting. The staff is currently considering the input received during this public meeting and the NEI letter to the Commission, dated October 3,</p>	<p>FY 2002–FY 2004</p>

## APPENDIX IV: MANAGEMENT CHALLENGES

<i>Actions/Milestones</i>	<i>Schedule</i>
<p>2002. Assessment of the feasibility of the redefinition of the spectrum of large break sizes relevant to 10 CFR 50.46 is ongoing. A computational code is being developed which will determine the LOCA frequency spectrum as a function of effective break size. This analysis will incorporate LOCA contributions from pipe breaks and other component failures. A formal expert elicitation process has also been initiated to determine key input variables for this code and identify the piping systems to be analyzed. The expert panel members have been selected and a kick-off meeting is scheduled for February 2003. The comprehensive technical study will be completed in 2004.</p>	
<p>Issue Revision 1 to Regulatory Guide (RG) 1.174, "An Approach for Using Probabilistic Risk Assessment In Risk-Informed Decisions On Plant-Specific Changes to the Licensing Basis."</p> <p>Status: The staff published Revision 1 to RG 1.174 as DG-1110 for public comment on July 23, 2001. This revision was completed in November 2002.</p>	Complete
<p>Issue Revision 2 to Regulatory Guide 1.174, "An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis."</p>	FY 2004
<p>Modify the scope of special treatment requirements and submit the final rule to the Commission.</p> <p>Status: The staff submitted the proposed rule to the Commission (SECY-02-0176) on September 30, 2002.</p>	Complete
<p>Develop the technical basis for a risk-informed selection of a pressurized thermal shock (PTS) screening criterion to support a potential risk-informed PTS rulemaking effort.</p> <p>Status: The staff documented the technical basis in a draft report, which was issued on December 31, 2002.</p>	FY 2003
<p>Issue Regulatory Guide and Standard Review Plan for the ASME Standard for Probabilistic Risk Assessment Quality.</p> <p>Status: The staff has prepared a draft Regulatory Guide (DG-1122) to provide guidance to licensees on the quality needed for PRA information used in risk-informed applications. This guide also addresses the staff's position on the ASME PRA Standard and the industry's guidance on PRA peer reviews. A public workshop was held on September 19, 2002, to discuss the status of DG-1122 and its associated Standard Review Plan chapter. The guide was issued for public review and comment in November 2002 and a public workshop was held on January 9, 2003. Final Regulatory Guide is scheduled for completion in June 2003. Revision 1, to address</p>	Ongoing



#### APPENDIX IV: MANAGEMENT CHALLENGES

<i>Actions/Milestones</i>	<i>Schedule</i>
<p>Develop a plan for improving coherence among risk-informed activities. <b>Status:</b> The staff outlined its plan in the last version of the Risk-Informed Regulation Implementation Plan (SECY-02-0131), dated July 12, 2002) and will present a detailed plan to the Commission in January 2003.</p>	FY 2003
<p><b>NUCLEAR MATERIALS SAFETY AND NUCLEAR WASTE SAFETY ARENAS</b></p> <p>Solicit public and other stakeholder views in developing revisions to the fuel cycle facilities oversight program. <b>Status:</b> During FY 2002, the NRC canceled the public outreach and major program revisions to the fuel cycle oversight process to allow for development and incorporation of additional risk information. The staff completed its plan for process changes in FY 2002.</p>	Complete
<p>Issue Integrated Issue Resolution Status Report (IRSR) associated with proposed high-level waste repository. <b>Status:</b> The NRC published the Integrated IRSR as NUREG-1762 in July 2002.</p>	Complete
<p>Develop case studies in Nuclear Materials Safety and Nuclear Waste Safety arena program areas to test screening criteria and develop draft safety goals. <b>Status:</b> the staff has completed its development of case studies and screening criteria (now referred to as screening considerations), and is continuing to develop safety goals.</p>	FY 2002–FY 2004
<p>Develop and conduct training in application of risk analysis. <b>Status:</b> Generally applicable risk training for Office of Nuclear Material Safety and Safeguards (NMSS) staff and management was offered on numerous occasions throughout FY 2002 and is ongoing. Application-specific risk training began in FY 2001 and is ongoing. An additional course, P-405, Byproduct Materials System of Risk Analysis and Evaluation in NMSS, was developed in FY 2002.</p>	FY 2002–FY 2004
<p>Conduct a probabilistic risk assessment for dry cask storage. Issue draft report on screening analysis. <b>Status:</b> The staff issued the draft report in June 2002, with the final report scheduled for April 2003.</p>	FY 2002–FY 2003

#### **APPENDIX IV: MANAGEMENT CHALLENGES**

<b><i>Actions/Milestones</i></b>	<b><i>Schedule</i></b>
<p>Identify NMSS regulatory applications amendable to increased use of risk insights.</p> <p><b>Status:</b> In FY 2002, the NRC implemented changes to the materials inspection program, which resulted in a 20-percent efficiency by (1) focusing inspection scheduling on those facilities of highest risk to safety, (2) implementing changes to streamline the preparation for materials inspections, and (3) empowering inspectors to streamline the inspection report writing process.</p>	<p>FY 2002–FY 2004</p>
<p>Revise the Licensee Performance Review process (MC 2604) to make it more timely and efficient, and revise the guidance documents governing the implementation of the fuel cycle inspection program (MC 2600).</p> <p><b>Status:</b> The staff completed its revision of MC 2604 on June 27, 2002, followed by MC 2600 on September 30, 2002.</p>	<p>Complete</p>
<p>Revise fuel cycle inspection procedures. Review and revise all inspection procedures for fuel cycle facilities to determine applicability, delete duplication of effort, incorporate risk-informed and performance-based approaches, and ensure compatibility with new 10 CFR Part 70 requirements.</p>	<p>FY 2003–FY 2004</p>
<p>Develop guidance document to aid in the application of risk analysis techniques to NMSS licensing issues.</p>	<p>FY 2003–FY 2004</p>

## **APPENDIX IV: MANAGEMENT CHALLENGES**

**CHALLENGE 3: Identification, acquisition, and implementation of information technologies.**  
(GAO identified a comparable challenge.)

<i><b>Actions/Milestones</b></i>	<i><b>Schedule</b></i>
<b>Automated Information Systems (AIS) Security</b> Complete updates and revisions to the NRC's AIS Security Policy Milestone: Issue final draft, revised policy and handbook.	FY 2003
Enhance the interim information systems security incident response procedures and enhance the vulnerability patch dissemination and tracking process. Milestone: Incorporate revised policies into MD 12.5.	FY 2003
Formally specify the NRC Firewall Policy. Milestone: Issue updated firewall policy.	FY 2003
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. Milestone: <ul style="list-style-type: none"><li>- Conduct market survey.</li><li>- Conduct pilot.</li><li>- Determine requirements to field secure INTRANET capabilities to all NRC users.</li></ul>	FY 2003 FY 2003 FY 2003
<b>Agencywide Documents Access and Management System (ADAMS)</b> Release ADAMS version 4.0.	Complete
<b>External WEB Site</b> Complete implementation of Communication Plan.	Complete
Deploy re-designed external Web site.	Complete
<b>Electronic Information Exchange (EIE)</b> Resolve public comment on the draft final rule.	FY 2003
Issue EIE rule.	FY 2003
Enable secured EIE for reactor and material stakeholders.	Complete
<b>Capital Planning and Investment Control (CPIC)</b> Circulate revised draft CPIC Management Directive (MD) 2.2.	FY 2003
Issue revised CPIC MD 2.2.	FY 2003
Use CPIC lessons learned to improve CPIC process.	FY 2003

#### **APPENDIX IV: MANAGEMENT CHALLENGES**

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<b><i>Actions/Milestones</i></b>	<b><i>Schedule</i></b>
<b>Digital Data Management System (DDMS)</b> Develop DDMS proof-of-concept.	FY 2003
Deliver DDMS production system design	FY 2003
<b>PeopleSoft 8.x Upgrade</b> Verify strategy and scope.	FY 2003
Execute Business Plan.	FY 2003
Execute Communication Plan.	FY 2003
Deploy PeopleSoft 8.x.	FY 2004

#### **APPENDIX IV: MANAGEMENT CHALLENGES**

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**CHALLENGE 4:** Administration of all aspects of financial management. (Aspects highlighted by the OIG were limited to financial reporting and effective oversight of the procurement process to eliminate fraud, waste, and abuse.) (GAO identified a comparable challenge.)

<i><b>Actions/Milestones</b></i>	<i><b>Schedule</b></i>
Continue to refine the pay/personnel time and labor reporting process.	Ongoing
Prepare the FY 2001 financial statements and receive an unqualified audit opinion.	Complete
Prepare the FY 2002 financial statements and receive an unqualified audit opinion.	FY 2003
Refine cost accounting system and continue cost management improvement efforts.	FY 2003
Replace the License Fee Bill Generator System.	FY 2004

## **APPENDIX IV: MANAGEMENT CHALLENGES**

### **CHALLENGE 5: Clear and balanced communication with NRC external stakeholders.**

<b>Actions/Milestones</b>	<b>Schedule</b>
<b>Public Meeting Feedback Form (SECY-00-0035, dated February 11, 2000)</b>	<b>Complete</b>
Continue to evaluate feedback forms in an effort to target areas for improving communications and track progress in improving public meetings.	Ongoing
<b>Conduct Semiannual Analysis</b> Letter dated April 4, 2002, from Dr. William D. Travers, Executive Director for Operations, regarding the completion of the pilot project (18-month).	Ongoing
<b>Communication Plans</b>	
<b>NUCLEAR MATERIALS SAFETY AND NUCLEAR WASTE SAFETY ARENAS</b> Development of Communication Plans: The public trust and confidence in the NRC's ability to carry out its mission is an important agency goal. The development of communication plans facilitates the implementation of public outreach efforts. Status: The Office of Nuclear Material Safety and Safeguards will continue to implement the nuclear materials and waste safety arena communication plans, and update them, as necessary. (See details below.)	Ongoing
<b>Develop Spent Fuel Transportation Communication Plan.</b> Status: Completed December 28, 2001.	Complete
Develop and implement site-specific decommissioning communication plans. (Completed Sequoyah Fuels Corp. Decommissioning Plan, February 2002). Status: Completed "Site-Specific Communication Plan for the Decommissioning of the Sequoyah Fuels Corporation Uranium Conversion Facility in Gore, Oklahoma" February 2002.	FY 2002-FY 2004
Conduct public meetings on significant issues in the fuel facility licensing and inspection program. Status: In FY 2002, the NMSS Division of Fuel Cycle Safety and Safeguards (FCSS) conducted approximately 25 public meetings on significant regulatory issues.	Ongoing

#### **APPENDIX IV: MANAGEMENT CHALLENGES**

<b><i>Actions/Milestones</i></b>	<b><i>Schedule</i></b>
<p>Make public participation in the HLW regulatory program more accessible by continuing to conduct public meetings in Nevada on HLW program issues.</p> <p><b>Status:</b> In FY 2002, the staff held a total of seven public meetings in Nevada that addressed the Yucca Mountain Review Plan, 10 CFR Part 63, and Site Sufficiency comments, along with broader topics such as the licensing process.</p>	FY 2002-FY 2004
<p>Hold public meetings to respond to citizens' concerns and interests.</p> <p><b>Status:</b> In FY 2002, the staff held meetings at Diablo Canyon, Haddam Neck, Fitzpatrick, and the San Onofre Nuclear Generating Station (California Coastal Commission).</p>	Ongoing
<p>Hold a series of public meetings, workshops, and training associated with the revised 10 CFR Part 35.</p> <p><b>Status:</b> In FY 2002, the staff held a series of five public workshops at NRC headquarters and regional locations and in Puerto Rico.</p>	Complete
<p>Post rulemakings, guidance, and meeting summaries on the agency's Web site. Continue efforts to expand and redesign the NMSS Web page.</p>	Ongoing

## APPENDIX IV: MANAGEMENT CHALLENGES

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

<i>Actions/Milestones</i>	<i>Schedule</i>
<p><b>NUCLEAR REACTOR SAFETY ARENA</b></p> <p>Initiate periodic meetings with intra-agency stakeholders to enhance communications and support.</p> <p><b>Status:</b> The staff is currently implementing the EDO's expectations for internal communications as described in his memorandum dated August 31, 2001, resulting from the Senior Executive Service (SES) Candidate Development Program initiative for internal communications. NRR's Leadership Team has made substantial progress in becoming a cohesive unit. As a result, the office has developed and improved the prioritization of NRR user needs and improved the interface between the Office of Nuclear Regulatory Research and NRR. Monthly meetings are held to enhance integration and cooperation throughout both offices. Communications with the regions has improved with the establishment of constructive relationships with key regional stakeholders and periodic conference (video teleconferencing) calls and trips. NRR has also implemented an office-level infrastructure improvement to update NRR office procedures, policies, and other guidance documents.</p>	Complete
<p>Complete Phase 3 of Centralized Work Planning in NRR.</p> <p><b>Status:</b> Phase 3 of Centralized Work Planning involved developing a software module for the Time, Resource, and Inventory Management (TRIM) computer program to provide an algorithm for near-term personnel scheduling. In FY 2001, the staff completed the development of TRIM, testing of the communications interface between TRIM and STARFIRE, and partial deployment. The TRIM-STARFIRE interface was deployed in November 2001. The officewide deployment of TRIM was completed on February 11, 2002.</p>	Complete
<p><b>NUCLEAR MATERIALS SAFETY AND NUCLEAR WASTE SAFETY ARENA</b></p> <p>Facilitate effective communication between the Office of Nuclear Material Safety and Safeguards and the Office of Nuclear Security and Incident Response, and enhance integration and cooperation in areas of common concern.</p> <p><b>Status:</b> In FY 2002, the two offices designated points of contact for coordinating on issues of mutual interest, and routinely conducted meetings to facilitate information sharing. Interaction between the two offices is ongoing.</p>	Ongoing



## APPENDIX IV: MANAGEMENT CHALLENGES

<i>Actions/Milestones</i>	<i>Schedule</i>
<p>Conduct Materials arena headquarters/regions counterpart meetings.  <b>Status:</b> Division Directors Counterpart Meetings were held in February and August 2002.</p>	Ongoing
<p>Continue to implement and update the Nuclear Materials and Waste Safety arena communications plans, as necessary (see Management Challenge 4).  <b>Status:</b> In FY 2002, the staff developed site-specific decommissioning plans for NRC headquarters and Region I sites. Implementation of communication plans continued (e.g., event response, medical use, and spent fuel transportation). Communication plan implementing activities and/or training efforts were conducted in FY 2002.</p>	Ongoing
<p>Initiate actions within NMSS to improve intra-office communication to better enable staff to do their jobs, encourage teamwork, and foster a sharing of insights across organizations and programs:</p> <ul style="list-style-type: none"> <li>• Conduct NMSS-wide staff meetings several times each year to convey key policy and procedural information in a timely manner.</li> <li>• Support staff rotational and team work group assignments in order to share insights across organizations/strategic arenas, and to increase team-building and arena-based solutions to issues.</li> <li>• Form an Empowerment Task Force to encourage exchange of ideas and communication between staff and management.</li> <li>• Continue efforts to empower managers by clearly communicating and reaching agreement up-front on expectations for emergent and ongoing work.</li> <li>• Continue periodic meetings between NMSS senior management contacts and NMSS members of EEO Advisory Committees to improve communication on EEO and diversity issues.</li> <li>• Conduct regularly scheduled meetings with staff at all levels (division, section, branch, and office-wide) to communicate essential information and ensure open lines of communication up and down the organization.</li> </ul> <p><b>Status:</b> In FY 2002, NMSS conducted two office-wide staff meetings to convey key policy and procedural information; regularly scheduled meetings at all organizational levels (division, branch, and section) to ensure communication of essential information and ensure open lines of communication; staff rotational and team work group assignments were supported to encourage team-building and sharing of information; efforts continued to empower managers and staff by clearly communicating and reaching agreement on expectations of emerging and ongoing work; periodic meetings were conducted between NMSS senior managers and NMSS members of EEO Advisory Committees to improve communication on EEO and diversity initiatives.</p>	Ongoing

#### **APPENDIX IV: MANAGEMENT CHALLENGES**

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<b><i>Actions/Milestones</i></b>	<b><i>Schedule</i></b>
Conduct periodic meetings with managers in NMSS, the Office of State and Tribal Programs, and the Office of Nuclear Security and Incident Response.	Ongoing
Manage and coordinate activities, policies, and efforts with managers from other NRC offices through the biweekly meetings of the High-Level Waste Board, bimonthly NRC/EPA Interface meetings, biweekly Decommissioning Management Board meetings, and weekly NMSS and division staff meetings.	Ongoing
Manage and coordinate decommissioning activities, policies, and efforts with managers from other NRC offices through the biweekly meeting of the Decommissioning Management Board.	Ongoing (biweekly)
Hold quarterly meetings of NMSS and Office of Nuclear Regulatory Research managers to review the status of cooperative efforts and discuss issues or concerns.	Ongoing (quarterly)

## **APPENDIX IV: MANAGEMENT CHALLENGES**

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**CHALLENGE 7:** Regulatory processes that are integrated and continue to meet NRC's safety mission in a changing external environment.

<i><b>Actions/Milestones</b></i>	<i><b>Schedule</b></i>
<b>NUCLEAR REACTOR SAFETY ARENA</b> Issue a final Commission paper recommending followup actions. Status: The staff issued SECY-02-0143 on July 26, 2002.	Complete
<b>NUCLEAR MATERIALS SAFETY AND NUCLEAR WASTE SAFETY ARENAS</b> Interoffice communication on important issues such as the high-level waste management and decommissioning areas is made more effective through the use of Management Boards, which meet biweekly to discuss status reports regarding action items and to provide additional direction to these programs, particularly in the area of policy issues.	Ongoing (biweekly)
The Offices of the General Counsel, Secretary to the Commission, Chief Information Officer, Atomic Safety Licensing Board Panel, and Nuclear Materials Safety and Safeguards continued to work together to prepare for receipt of the HLW repository license application and hearing, which involves getting the systems and process in place to fulfill the 3-year mandate.	FY 2002–FY 2004
Hold quarterly meetings of the PRA Steering Committee to ensure that risk-informed activities are integrated across the agency.	Ongoing (quarterly)
Participate on the agency's Research Effectiveness Review Board to ensure that the research program is effective in meeting the agency's needs.	FY 2002–FY 2004
Participate on the NRC's Response to Terrorist Attacks Task Force and the Safeguards Steering Committee to ensure an integrated agency response to the terrorist attacks on September 11, 2001.	Complete

## APPENDIX IV: MANAGEMENT CHALLENGES

<i><b>Actions/Milestones</b></i>	<i><b>Schedule</b></i>
<p>Conduct meetings with stakeholders to provide an opportunity for exchange of information so that stakeholder viewpoints can be understood.</p> <p>Activities in the Nuclear Materials and Waste Safety arenas include the following representative examples:</p> <ul style="list-style-type: none"> <li>• During FY 2002, NMSS' FCSS conducted approximately 25 public meetings on significant regulatory issues.</li> <li>• Conducted seven public meetings in Nevada that addressed the Yucca Mountain Review Plan, 10 CFR Part 63, and site Sufficiency comments, along with broader topics such as the HLW licensing process.</li> <li>• Held a series of public meetings, workshops, and training associated with the revised 10 CFR Part 35.</li> <li>• During FY 2002, held public meetings at Diablo Canyon, Haddam Neck, Fitzpatrick, and the San Onofre Nuclear Generating Station (California Coastal Commission) to respond to citizens' concerns and interests.</li> <li>• During FY 2002, held public workshops for rulemaking related to 10 CFR Part 71, "Packaging and Transportation of Radioactive Materials".</li> </ul>	Ongoing
<p>Review and update the listing of external factors influencing our activities. Also, continue analyzing the external environment and document planning assumptions each year as part of the NRC's PBPM process.</p>	Ongoing
<p>A Risk Steering Committee, comprised of managers and staff from the Office of Nuclear Material Safety and Safeguards (NMSS), Nuclear Regulatory Research (RES), and Nuclear Reactor Regulation (NRR) with expertise in risk-informing initiatives, provides guidance and sets expectations for the NMSS Risk Task Group for implementing risk-informed initiatives in the Nuclear Materials and Waste Safety arenas and also provides peer review of risk-informed products.</p>	Ongoing
<p>The Rulemaking Coordinating Committee (RCC) was formed in 1998 to ensure that the NRC rulemaking process remains consistent among NMSS and NRR. The RCC consists of managers from those offices, as well as the Office of Administration, and Office of the General Counsel, who routinely meet to discuss rulemaking-related issues. A recent initiative of the RCC was the establishment of an interoffice task force to review the current rulemaking process and identify areas with potential for process improvements and/or enhancements.</p>	Ongoing

#### **APPENDIX IV: MANAGEMENT CHALLENGES**

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<b><i>Actions/Milestones</i></b>	<b><i>Schedule</i></b>
Conduct Evaluation of Changes to Decommissioning Program to assess effectiveness of the decommissioning program in achieving performance goals and implementing strategies, and recommend improvements.	FY 2003

## **APPENDIX IV: MANAGEMENT CHALLENGES**

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**CHALLENGE 8:** Maintenance of a highly competent staff to carry out NRC's public health and safety mission (i.e., human capital management). (GAO identified a comparable challenge.)

<i><b>Actions/Milestones</b></i>	<i><b>Schedule</b></i>
Validate existing skill needs and identify new needs in NMSS, NRR, and RES.	Complete
Adjust/implement new gap closure strategies to respond to new needs.	Complete
Expand the strategic workforce plan to include regions and other offices, as appropriate.	Complete
Update the inventory of existing staff skills on an annual basis.	FY 2003
Continue to implement strategies to close identified skill gaps.	FY 2003
Identify new skills gaps and implement additional gap closure strategies, as necessary. Status: The staff is analyzing the skills survey results from FY 2002 and working with program managers to close the identified skill gaps.	FY 2003

## **APPENDIX V**

# **PROGRAM LINKS TO PERFORMANCE GOALS**

**APPENDIX V  
PROGRAM LINKS TO PERFORMANCE GOALS**

**FY 2004 NUCLEAR REACTOR SAFETY**

LINKS TO PERFORMANCE GOALS	PERFORMANCE GOALS			
	Maintain Safety	Increase Public Confidence	Make NRC Activities & Decisions More Effective, Efficient, and Realistic	Reduce Unnecessary Regulatory Burden
<b>FY 2004 PROGRAMS (\$305,816K, 1,624 FTE)</b>				
Reactor Licensing (\$54,122K, 374 FTE)	X	X	X	X
Reactor License Renewal (\$19,670K, 100 FTE)	X	X	X	X
Reactor Inspection and Performance Assessment (\$73,172K, 584 FTE)	X	X	X	X
New Reactor Licensing (\$33,491, 112 FTE)	X	X		
Reactor Incident Response (\$6,307K, 31 FTE)	X	X	X	X
Reactor Safety Research (\$61,980K, 149 FTE)	X	X	X	X
Reactor Technical Training (\$12,641K, 71 FTE)	X	X	X	
Reactor Enforcement Actions (\$1,916K, 15 FTE)	X	X	X	X
Reactor Investigations (\$4,256K, 31 FTE)	X	X	X	X
Reactor Legal Advice (\$2,966K, 24 FTE)	X	X	X	X
Reactor Adjudication (\$1,386K, 8 FTE)	X	X	X	X
Homeland Security (\$33,909K, 125 FTE)	X	X	X	X



## **APPENDIX V: PROGRAM LINKS TO PERFORMANCE GOALS**

### **FY 2004 NUCLEAR MATERIALS SAFETY**

LINKS TO PERFORMANCE GOALS	PERFORMANCE GOALS			
	Maintain Safety and Safeguards	Increase Public Confidence	Make NRC Activities & Decisions More Effective, Efficient, and Realistic	Reduce Unnecessary Regulatory Burden
<b>FY 2004 PROGRAMS (\$71,234, 384 FTE)</b>				
Fuel Facilities Licensing and Inspection (\$13,666K, 99 FTE)	X	X	X	X
Nuclear Materials Users Licensing and Inspection (\$25,960K, 163 FTE)	X	X	X	X
State and Tribal Programs (\$4,633K, 33 FTE)	X	X	X	X
Materials Safety Research (\$1,734K, 7 FTE)	X	X	X	X
Materials Incident Response (\$254K, 2 FTE)	X	X	X	
Materials Technical Training (\$2,559K, 9 FTE)	X	X	X	
Materials Enforcement Actions (\$981K, 8 FTE)	X	X	X	X
Materials Investigations (\$1,482K, 11 FTE)	X	X	X	X
Materials Legal Advice (\$1,478K, 12 FTE)	X	X	X	X
Materials Adjudication (\$826K, 5 FTE)	X	X	X	X
Homeland Security (\$17,661K, 35 FTE)	X	X	X	X

**APPENDIX V: PROGRAM LINKS TO PERFORMANCE GOALS****FY 2004 NUCLEAR WASTE SAFETY**

LINKS TO PERFORMANCE GOALS	PERFORMANCE GOALS			
	Maintain Safety and Safeguards	Increase Public Confidence	Make NRC Activities & Decisions More Effective, Efficient, and Realistic	Reduce Unnecessary Regulatory Burden
<b>FY 2004 PROGRAMS (\$70,117K, 253 FTE)</b>				
High-Level Waste Regulation (\$33,100K, 76 FTE)	X	X	X	X
Spent Fuel Storage and Transportation Licensing and Inspection (\$11,957K, 67 FTE)	X	X	X	X
Environmental Protection and Low-Level Waste Management (\$4,834K, 14 FTE)	X	X	X	X
Regulation of Decommissioning (\$8,930K, 53 FTE)	X	X	X	X
Waste Safety Research (\$8,358K, 22 FTE)	X	X	X	X
Waste Technical Training (\$708K, 4 FTE)	X	X	X	
Waste Safety Legal Advice (\$999K, 8 FTE)	X	X	X	X
Waste Adjudication (\$591K, 4 FTE)	X	X	X	X
Homeland Security (\$640K, 5 FTE)	X	X	X	X

## **APPENDIX VI**

# **REPORT ON DRUG TESTING**

## **APPENDIX VI**

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

The Congress and the 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 are not covered by this report. 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 was initiated for non-bargaining unit employees in November 1988 and for bargaining unit employees in December 1990, after an agreement was negotiated with the National Treasury Employees Union.

Under the NRC's Drug Testing Program, employees in certain "testing-designated" positions are subject to random testing. Specifically, these positions include (1) regional and headquarters employees who have unescorted access to vital or protected areas of nuclear plants, Category I fuel facilities, and uranium enrichment facilities; (2) employees who have assigned responsibilities or are on call for regional or headquarters incident response centers; (3) employees who require access to classified information (e.g., national security information or restricted data); and (4) employees who operate motor vehicles and carry passengers.

Approximately 1,550 NRC employees occupy testing-designated positions and are subject to random testing. Potential selectees interviewed for positions in these categories are subject to applicant testing.

The NRC conducted approximately 965 tests of all types between October 1, 2001, and September 30, 2002. Since each employee subject to random testing has an equal chance of being selected each time, some NRC employees were randomly tested more than once. All random testing results during this time period have been negative.

The NRC also completed internal quality control reviews during the past year to ensure that the agency's program continues to be administered in a fair, confidential, and effective manner.

The NRC's Drug Testing Program is based on the principles and guidance provided through E.O. 12564, Public Law 100-71, Department of Health and Human Services guidelines, and Commission decisions.

## **APPENDIX VII**

# **REIMBURSABLE WORK AGREEMENTS**

## APPENDIX VII

<b>U.S. NUCLEAR REGULATORY COMMISSION SUMMARY OF REIMBURSABLE WORK AGREEMENTS<sup>1</sup> (New Budget Authority)</b>			
	<b>FY 2002</b>	<b>FY 2003 (Estimate)</b>	<b>FY 2004 (Estimate)</b>
<b>INTERNATIONAL ASSISTANCE TO FOREIGN GOVERNMENTS AND ORGANIZATIONS</b>			
International Invitational Travel (IAEA & various foreign governments and international organizations)	\$72,000	\$80,000	\$80,000
Implementation of Additional Protocol to the US-IAEA Safeguards Agreement (DOS)	\$0	\$200,000	\$200,000
Nuclear Safety Initiatives for Central and Eastern Europe (AID)	\$150,000	\$0	\$0
Nuclear Safety Initiatives for the New Independent States (AID)	\$3,500,000	\$3,500,000	\$3,500,000
<b>ADMINISTRATIVE AGREEMENTS</b>			
Agreement States Training (State Governments)	\$188,000	\$180,000	\$180,000
Criminal History Program (Licensees)	\$1,020,000	\$1,052,000	\$1,052,000
Information Access Authorization Program (Licensees)	\$15,000	\$2,460,000	\$2,460,000
Material Access Authorization Program (Licensees)	\$340,000	\$90,000	\$90,000
Department of Energy Employee Detail	\$48,000	\$0	\$0
Investigative Assistance Regarding September 11, 2001 (FBI)	\$12,000	\$0	\$0
<b>OTHER AGREEMENTS</b>			
Fissile Materials Disposition (DOE)	\$195,000	\$205,000	\$205,000
DOE Advanced Gas Reactor Technology (DOE)	\$500,000	\$500,000	\$400,000
NRC Support for Mars Survey 2003 Lander Programs in the Development of Safety Analysis Report and Safety Evaluation Report (NASA)	\$40,000	\$0	\$30,000
Foreign Cooperative Research Agreements (Multiple)	\$1,547,000	\$2,108,000	\$2,000,000
Foreign Research Reactor Spent Nuclear Fuel (DOE)	\$0	\$100,000	\$200,000

<sup>1</sup> Does not include classified reimbursable work agreements.

**APPENDIX VII: REIMBURSABLE WORK AGREEMENTS**

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	<b>FY 2002</b>	<b>FY 2003 (Estimate)</b>	<b>FY 2004 (Estimate)</b>
Navy Porting Reviews (U.S. Navy)	\$15,000	\$15,000	\$15,000
VIRGINIA Class Submarine Propulsion Plant Review (DOE)	\$920,000	\$63,500	\$0
West Valley Demonstration Project Fuel Shipments Review (DOE)	\$25,000	\$0	\$0
MARSSIM Assistance with Manual Updates (EPA)	\$30,000	\$0	\$0
Idaho National Engineering and Environmental Laboratory Incidental Waste Determinations (DOE)	\$0	\$40,000	\$0
Review of DOE Type B and Fissile Material Transportation Package Designs (DOE)	\$83,000	\$1,000,000	\$1,600,000
MASCA Program (DOE)	\$150,000	\$0	\$0
<b>TOTAL</b>	<b>\$8,850,000</b>	<b>\$11,593,500</b>	<b>\$12,012,000</b>

**APPENDIX VIII**  
**CROSSCUTTING FUNCTIONS**  
**WITH OTHER GOVERNMENT AGENCIES**



## **APPENDIX VIII**

### **CROSSCUTTING FUNCTIONS WITH OTHER GOVERNMENT AGENCIES**

Several Government agencies have missions that relate to that of the NRC. In reviewing the strategic plans of those agencies, the NRC identified no inconsistent or duplicative areas in this plan. Nonetheless, the NRC continues to be alert to potential inconsistencies or duplication in its interactions and cooperative activities, which are important in accomplishing the agency's mission. Where needed, the NRC has developed, or is currently developing, memoranda of understanding or other agreements with these agencies to ensure that areas of mutual interest and cooperation are treated in a consistent, coordinated, and complementary way that avoids unnecessary duplication or conflict. To develop programs in those areas that are critical to the NRC's mission, senior agency management meet with counterparts in other agencies and establish plans and strategies in the areas of common programs and goals.

Interagency committees are also established, as necessary, to facilitate consensus on programs and promote consistent implementation approaches. One such example is the Interagency Steering Committee on Radiation Standards.

The Commission also receives periodic briefings on the status of other agencies' programs, such as DOE's High-Level Waste program. In other areas of mutual interest, the NRC staff coordinates with other agencies, as appropriate. The review of crosscutting programs, the coordination of those programs, and the identification of any issues are also integral parts of the NRC's internal technical program review process.

In the area of crosscutting activities and functions within the NRC, there is no substantive overlap among the agency's programs. The following table identifies the major crosscutting functions with other agencies and their relationship to NRC programs, and is followed by descriptions of the specific NRC areas of mutual interest with other agencies.

## APPENDIX VIII: CROSS-CUTTING FUNCTIONS

Agency	Areas of Mutual Interest	NRC Program/(Strategic Arena)
Department of Energy	High-Level Waste Disposal	High-Level Waste (Nuclear Waste Safety)
	Transportation and Storage of Spent Fuel and Waste	Spent Fuel Storage and Transportation Licensing and Inspection (Nuclear Waste Safety)
	Uranium Mill Tailings Radiation Control Act	Fuel Facilities Licensing and Inspection (Nuclear Materials Safety)
	Low-Level Waste	Regulation of Low-Level Waste (Nuclear Waste Safety)
	West Valley Demonstration Project	Regulation of Decommissioning (Nuclear Waste Safety)
	Excess Plutonium Disposition Mixed Oxide Fuel Fabrication Regulatory Oversight at Gaseous Diffusion Plants	Fuel Facilities Licensing and Inspection (Nuclear Materials Safety)
	Mitigation of Threat from Certain Discrete Radioactive Material	Regulation of Low-Level Waste (Nuclear Waste Safety)
	Security of Classified National Security Information and Restricted Data	Fuel Facilities Licensing and Inspection Homeland Security (Nuclear Materials Safety)
	Tracking Nuclear Materials	Homeland Security (Nuclear Materials Safety)
	Energy Infrastructure	Reactor Incident Response (Nuclear Reactor Safety)
	Excess Plutonium Disposition	International Nuclear Safety Support (International Nuclear Safety Support)
	New Reactor Licensing	New Reactor Licensing (Nuclear Reactor Safety)
	Advanced Gas Reactor Technology and Fuel Evaluations	Nuclear Reactor Licensing (Nuclear Reactor Safety)
U.S. Geological Survey	Updates to seismic and geological data for new reactor plant sites	New Reactor Licensing (Nuclear Reactor Safety)

## APPENDIX VIII: CROSS-CUTTING FUNCTIONS

Agency	Areas of Mutual Interest	NRC Program/(Strategic Arena)
Department of Energy Federal Bureau of Investigation Customs Service Defense Intelligence Agency Central Intelligence Agency Department of State National Security Council Federal Emergency Management Agency Department of Homeland Security Department of Transportation Department of Justice Secret Service Bureau of Alcohol, Tobacco, and Firearms U.S. Coast Guard Department of Defense Federal Aviation Administration Environmental Protection Agency	Threat Assessment Safeguards (Physical Protection and Material Control and Accounting) Control of Sources	Reactor Licensing Reactor Incident Response (Nuclear Reactor Safety)  Fuel Facilities Licensing and Inspection Nuclear Materials Users Licensing and Inspection Materials Incident Response Homeland Security (Nuclear Materials Safety)  Spent Fuel Storage and Transportation Licensing and Inspection (Nuclear Waste Safety)  Management Services (Management and Support)
Environmental Protection Agency	Groundwater Protection Site Release Standards Review of Grading of Environmental Impact Statements More Efficient Regulation of Mixed Waste, In-Situ Leach Uranium Recovery Facilities, and Low-End Source Material	Fuel Facilities Licensing and Inspection (Nuclear Materials Safety)  Regulation of Decommissioning Environmental Protection and Low-Level Waste Management (Nuclear Waste Safety)
	High-Level Waste Site-Specific Standards	High-Level Waste Regulation (Nuclear Waste Safety)
Council on Environmental Quality	Administers Environmental Policy Under the National Environmental Policy Act	High-Level Waste Regulation Regulation of Decommissioning Environmental Protection and Low-Level Waste Management (Nuclear Waste Safety)
Federal Bureau of Investigation	Response to Suspected Terrorist or Criminal Initiated Threat	Reactor Incident Response (Nuclear Reactor Safety)  Fuel Facilities Licensing and Inspection Homeland Security (Nuclear Materials Safety)
Department of Homeland Security	Response to Suspected Terrorist Threat or Incident Involving Licensed Reactor, Material, or Fuel Facilities	Reactor Incident Response (Nuclear Reactor Safety)  Materials Incident Response (Nuclear Materials Safety)

## APPENDIX VIII: CROSS-CUTTING FUNCTIONS

Agency	Areas of Mutual Interest	NRC Program/(Strategic Arena)
Federal Emergency Management Agency	Offsite Nuclear Power Plant Emergency Planning	Reactor Licensing Reactor Incident Response (Nuclear Reactor Safety)
	Offsite Fuel Cycle Facility Emergency Planning	Fuel Facilities Licensing and Inspection Materials Incident Response (Nuclear Materials Safety)
	National Dam Safety Program	Fuel Facilities Licensing and Inspection (Nuclear Materials Safety)
	Potassium Iodide Supplement Program	Reactor Incident Response (Nuclear Reactor Safety)
Federal Energy Regulatory Commission	Utility Economic Deregulation, Antitrust and Market Power Issues	Reactor Licensing (Nuclear Reactor Safety)
Department of Transportation	Transportation of Radioactive and Fissile Materials Emergency Transportation	Spent Fuel Storage and Transportation Licensing and Inspection Incident Response (Nuclear Waste Safety)
Surface Transportation Board	Private Fuel Storage Environmental Impact Statement	Spent Fuel Storage and Transportation Licensing and Inspection (Nuclear Waste Safety)
Food & Drug Administration	Approval of Medical Devices Incorporating Byproduct Materials, Radiopharmaceuticals, and Radioactively Labeled Biologic Materials	Nuclear Materials Users Licensing and Inspection (Nuclear Materials Safety)
Occupational Safety & Health Administration	Worker Health and Safety	Reactor Licensing and Inspection (Nuclear Reactor Safety)  Fuel Facilities Licensing and Inspection (Nuclear Materials Safety)
Department of Health and Human Services, Public Health Service, Agency for Toxic Substances and Disease Registry	Public Health and Safety in the Release and Transportation of Ionizing Radiation	Reactor Inspection Reactor Incident Response (Nuclear Reactor Safety)  Fuel Facilities Licensing and Inspection Materials Incident Response State and Tribal Programs (Nuclear Materials Safety)  High-Level Waste Regulation (Nuclear Waste Safety)

## APPENDIX VIII: CROSS-CUTTING FUNCTIONS

Agency	Areas of Mutual Interest	NRC Program/(Strategic Arena)
Department of Interior	Protection of the Environment	Reactor Licensing (Nuclear Reactor Safety)  Fuel Facilities Licensing and Inspection (Nuclear Materials Safety)  Spent Fuel Storage and Transportation Licensing and Inspection (Nuclear Waste Safety)
Department of Labor Department of Justice	Enforcement	Reactor Enforcement Actions (Nuclear Reactor Safety)  Materials Enforcement Actions (Nuclear Materials Safety)
	Investigations	Reactor Investigations (Nuclear Reactor Safety)  Materials Investigations (Nuclear Materials Safety)
Department of State Department of Defense Agency for International Development Department of Energy	Nuclear Safety Assistance to Other Countries	Participation in International Activities (International Nuclear Safety Support)
Department of State Department of Defense Department of Energy Department of Commerce	Export of Nuclear and Nuclear Related Materials, Equipment, and Technology	Participation in International Activities (International Nuclear Safety Support)
National Security Council Department of State Department of Energy	Nuclear Safeguards Assistance to Other Countries	Participation in International Activities (International Nuclear Safety Support)
Department of State Department of Energy Department of Defense Representatives from various intelligence and investigative agencies	Compliance with Nonproliferation and Safeguards Treaties and Agreements	Participation in International Activities (International Nuclear Safety Support)
Department of State Department of Energy Department of Defense Representatives from various intelligence and investigative agencies	Assistance to Strengthen International Atomic Energy Agency Safeguards and activities with the Nuclear Energy Agency for cooperation with countries with advanced nuclear power programs.	Participation in International Activities (International Nuclear Safety Support)

## **APPENDIX VIII: CROSS-CUTTING FUNCTIONS**

**Department of Energy (DOE).** The NRC and DOE share responsibility for high-level waste (HLW) disposal. As specified in the Nuclear Waste Policy Act of 1982, as amended, DOE is responsible for characterizing the site and designing and constructing of the repository, while the NRC is responsible for regulatory oversight, including licensing the construction and operation of the facility. Our strategy is to provide regulatory guidance to DOE and prepare to review a license application for a high-level waste repository at a pace consistent with the national program. An existing agreement with DOE outlines the procedures for staff consultation and exchange of information. This procedural agreement was updated in 1999 to incorporate changes to the HLW program since 1993.

DOE is responsible for commercial, research, and naval spent nuclear fuel. Due to the nature of spent nuclear fuel associated with the Naval Nuclear Propulsion Program (NNPP), the NRC communicates directly with NNPP to gather information on issues involving criticality specific to NNPP.

The NRC also interacts with DOE on a number of activities associated with the transportation and storage of spent nuclear fuel and high-level radioactive waste. The NRC and DOE have a cost-reimbursable agreement for NRC review of spent fuel and HLW transportation casks used to ship spent research reactor fuel from a number of foreign countries to the United States, as well as NRC security reviews of the routes used within the United States. Further, DOE is required by law to use NRC-certified packaging for certain waste and spent fuel shipments. In addition, DOE and the NRC have established a cost-reimbursable agreement for the NRC to review and approve, as appropriate, DOE safety analysis reports for selected Type B and fissile material packages to support the issuance of NRC certificates of compliance for the packages.

The NRC and DOE have a joint responsibility for carrying out the Uranium Mill Tailings Radiation Control Act Title I Program and for the long-term care of reclaimed uranium mill tailings sites. Although DOE has the responsibility for carrying out remedial action, the NRC must concur in DOE's selection and completion of the remedial action, including groundwater corrective action, and must license the sites for long-term care. The NRC and DOE have a memorandum of understanding (MOU) to minimize or eliminate unnecessary duplication of effort between the agencies.

The NRC and DOE are assigned responsibilities for the management of low-level radioactive waste (LLW) under the Low-Level Radioactive Waste Policy Act of 1980 and its 1985 amendments. These responsibilities are different but complementary; thus, an MOU or other type of agreement has not been necessary. The NRC and DOE interact on LLW policy, regulatory, and technical issues.

DOE and the NRC have established a cost-reimbursable agreement for the NRC to provide technical assistance and coordination on regulatory issues associated with DOE's disposition of excess plutonium through measures other than mixed-oxide (MOX) fuel fabrication and irradiation. Under

## **APPENDIX VIII: CROSS-CUTTING FUNCTIONS**

that agreement, the NRC advises DOE on regulatory issues associated with activities such as pit disassembly, conversion, and immobilization.

The FY 1999 Defense Authorization Act (P.L. 105-261) gave the NRC statutory licensing authority over any MOX fuel fabrication facility constructed by DOE or its contractors to convert excess weapons plutonium into MOX reactor fuel. The facility is proposed to be located at DOE's Savannah River Site. This program depends on a number of factors that are outside of the NRC's control, including national policy, DOE funding, and Russian progress on dispositioning excess plutonium.

The NRC and DOE staff conduct periodic meetings to discuss and coordinate new reactor licensing activities. Meeting topics include the status of the NRC's reactor and site licensing efforts, and DOE's "Nuclear Power 2010" initiative.

DOE and the NRC have established a cost-reimbursable agreement for the NRC to give DOE an assessment of the generic technical and research issues associated with the design and technology of advanced high-temperature gas reactors such as the PBMR and the GT-MHR. The agreement includes the identification and assessment of generic modeling and validation issues for safety, transient and neutronics analytical codes and methods, and generic issues associated with proposed HTGR fuel qualification programs. The NRC and DOE are also pursuing a cooperative research agreement on HTGR fuel testing. The goals and objectives for DOE are directed toward supporting the development and qualification of gas reactor fuel for future U.S. licensing deployment. The goals and objectives for the NRC are directed toward developing the infrastructure that the NRC staff will need to conduct an independent safety assessment and prepare a safety evaluation regarding HTGR fuel performance and qualification.

The NRC and DOE have regulatory oversight of different portions of the Portsmouth and Paducah Gaseous Diffusion Plants. The NRC regulates those portions that are leased by the United States Enrichment Corporation (USEC), while DOE has the regulatory oversight for the remainder of the sites. The NRC anticipates a cost-reimbursable agreement to cover this work. In addition, regulatory issues occasionally arise which concern both DOE and the NRC. An MOU establishes the protocol by which the NRC and DOE address those issues.

The NRC and DOE currently have an agreement that outlines the procedures for NRC requests for DOE assistance to mitigate threats to the public from certain discrete radioactive material, including material that exceeds Class C waste (10 CFR 61.55) classification. This agreement is being formalized in an MOU.

The NRC and DOE share responsibility for the security of classified national security information and restricted data at certain licensees (principally high-enriched fuel facilities) and at USEC. Although DOE has principal responsibility at high-enriched fuel facilities under the auspices of its

## **APPENDIX VIII: CROSS-CUTTING FUNCTIONS**

classified contracts with those firms, the NRC has responsibility for the personnel security program for access to or control over strategic nuclear material and for information related to the plans for physical protection of the strategic nuclear material. At USEC, the NRC has primary responsibility for the protection of classified information, while DOE is responsible for the personnel security program. The NRC and DOE have several MOUs in place to minimize or eliminate duplication of effort and are instituting an additional MOU to address the MOX fuel fabrication facility.

The NRC and DOE also share responsibility for the Nuclear Materials Management and Safeguards System (NMMSS), which is a computer database that accounts for nuclear materials in the United States.

The NRC and DOE also have joint responsibility to protect public health and safety in connection with DOE's West Valley Demonstration Project (WVDP). DOE is responsible for decommissioning the WVDP in accordance with the NRC's decommissioning criteria. The NRC is a cooperating agency for DOE's Decommissioning and/or Long-Term Stewardship Environmental Impact Statement for the WVDP. In that capacity, the NRC is responsible for determining whether DOE's preferred alternative will meet the prescribed decommissioning criteria.

U.S. Geologic Survey (USGS). The NRC has tasked the USGS to develop seismic hazard curves that account for low frequency of occurrence seismic events at potential sites for new nuclear power plants. The development effort is based on updates to the USGS national seismic hazard maps. Several U.S. nuclear utilities are anticipating application submittals for early site permits to allow licensing reactor plants at these sites.

Department of Energy; Federal Bureau of Investigation; Central Intelligence Agency; Customs Service; Defense Intelligence Agency; Department of State; National Security Council; Federal Emergency Management Agency; Department of Homeland Security; Department of Transportation; Department of Justice; Secret Service; Bureau of Alcohol, Tobacco, and Firearms; U.S. Coast Guard; Department of Defense; Federal Aviation Administration; and Environmental Protection Agency.

As part of its mission to protect public health and safety and ensure the common defense and security, the NRC maintains close working relationships with other agencies to ensure that the design-basis threats for radiological sabotage and theft or diversion are current and accurate. The NRC also coordinates with other agencies on the establishment and maintenance of safeguards (physical protection and material control and accounting) measures and responsibilities. For this reason, the NRC has established MOUs and letters of agreement for the exchange of relevant threat information with most of these organizations, and will develop additional agreements, as needed. These arrangements also facilitate the the NRC's timely receipt of any potential threats to NRC-licensed materials or facilities. These arrangements may, at times, include interagency coordination of issues such as the proper control of radioactive materials.



## **APPENDIX VIII: CROSS-CUTTING FUNCTIONS**

**Environmental Protection Agency (EPA).** The NRC and EPA share the responsibility to protect the health and safety of the public and the environment, and the agencies have numerous MOUs and interrelated activities. NRC and EPA have been successful in many of these interrelated activities, including the development of the Multi-Agency Radiation Site Survey and Investigation Manual (MARSSIM) and the Multi-Agency Radiation Laboratory Protocols (MARLAP) Manual, support for the National Research Council Committee on the Biological Effects of Ionizing Radiation, development of the Joint NRC/EPA Guidance for Testing Requirements for Mixed Radioactive and Hazardous Waste, development of a Technical Position for Disposition of Cesium-137 Contaminated Emission Control Dust, development of a nationwide survey to analyze for radioactive contamination of sewer sludge and ash at publicly owned treatment works, and development of modeling scenarios in support of potential rulemakings for recycling and/or /reuse of radioactively contaminated materials. The NRC is currently working with EPA to define roles, responsibilities, and jurisdictions regarding orphan source issues and to develop regulations to facilitate the disposal of mixed wastes. In addition, the NRC is also working with EPA and authorized States to determine the extent to which the NRC can rely on EPA programs to protect groundwater at in situ leach uranium recovery facilities.

Under Section 309 of the Clean Air Act, the Administrator of the EPA is directed to review and publish any comments on the environmental impacts of Federal activities, including actions for which environmental impact statements (EISs) are prepared. Therefore, the NRC must file all EISs with the EPA. EPA reviews and rates these EISs, and publishes the results in the *Federal Register*. EISs that EPA finds to be unsatisfactory are referred to the Council on Environmental Quality.

As specified in the Energy Policy Act of 1992, EPA is tasked to develop site-specific HLW standards consistent with the recommendations of the National Academy of Sciences report on the Technical Bases for Yucca Mountain Standards. EPA issued its final standards for Yucca Mountain on June 13, 2001, and the NRC had 1 year from that date to develop an implementing rule. The NRC issued its final HLW regulation on November 2, 2001, consistent with EPA standards.

One area in which the NRC and EPA have been unsuccessful in their interrelated activities is setting standards to establish radiological criteria for decommissioning and cleanup of contaminated sites. EPA is responsible for developing general radiation standards, which are then reflected in NRC regulations and other requirements. The NRC continues to seek legislation, as reflected in House Report 107-159, "The Nuclear Regulatory Commission Authorization Act for Fiscal Year 2001," to clarify that, with very limited exceptions, the standard issued by the NRC and Agreement States governs cleanup of Atomic Energy Act material at facilities licensed by those entities. EPA expressed concerns with certain provisions of the NRC's license termination rule, and its guidance, "Establishment of Cleanup Levels for Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Sites with Radioactive Contamination," included a statement that the dose limits established in the NRC's license termination rule would not provide a protective basis for establishing preliminary remediation goals for cleanup at CERCLA sites and that the NRC sites

## **APPENDIX VIII: CROSS-CUTTING FUNCTIONS**

could require further remediation. Top-level NRC and EPA management will continue to address these issues to resolve the question of finality for sites that have complied with the NRC's cleanup standards for license termination. The NRC's current position is that changes to legislation are needed to resolve these issues; however, the NRC will continue to engage EPA in resolving this matter as directed by the House Report.

**Federal Bureau of Investigation.** The NRC and the FBI share responsibility (along with the Federal Emergency Management Agency) for responding to a suspected terrorist- or criminal-initiated threat or incident involving NRC-licensed facilities or materials. The FBI has lead responsibility for law enforcement during a threat or incident, while the NRC retains the responsibility for radiological matters. The NRC and FBI have an MOU to minimize or eliminate unnecessary duplication of effort between the two agencies.

**Council on Environmental Quality (CEQ).** The CEQ was established by Title II of the National Environmental Policy Act. The role of the CEQ is to assist and advise the President on Federal Government policies and programs that affect environmental quality. In cases where EISs are found to be unsatisfactory or where there is disagreement between the NRC and a consulting agency, the CEQ may be called upon to resolve the underlying issues or disagreements.

**Federal Emergency Management Agency (FEMA).** FEMA has the lead responsibility for offsite emergency planning related to nuclear power plants and nuclear materials. FEMA also has the lead in assessing the adequacy of offsite emergency plans and preparedness. The NRC is responsible for onsite radiological emergency preparedness and for reviewing FEMA's findings and determinations as to whether offsite plans are adequate and can be implemented. The NRC also has the responsibility to make radiological health and safety decisions with regard to the overall state of emergency preparedness, such as assurance for continued operation and shutdown of operating reactors. Should an actual peacetime radiological emergency require more than one agency to respond, the Federal Radiological Emergency Response Plan (FRERP) provides for coordination of all Federal response activities. The FRERP is maintained by the Federal Radiological Preparedness Coordinating Committee (FRPCC); the NRC is an active member in several FRPCC subcommittees that develop Federal procedures and guidance. In the event of an emergency involving an NRC-regulated entity, the NRC is the lead Federal agency and works closely with FEMA, DOE, EPA, the U.S. Department of Agriculture (USDA), Health and Human Services, and the National Oceanic and Atmospheric Administration. Representatives of these agencies train with, and are integrated into, the NRC response team. Response coordination on a broader scale is provided by the Federal Response Plan for emergencies of all kinds, including responses under the National Contingency Plan (NCP) for emergencies involving chemical and radiological hazards occurring together. The NRC is a member of the teams that coordinate actions under the NCP. The NRC and FEMA share responsibility (along with FBI) for responding to a suspected terrorist- or criminal-initiated threat or incident involving NRC-licensed facilities or materials. FEMA has lead responsibility for consequence management during a threat or incident, while the NRC retains the responsibility for

## **APPENDIX VIII: CROSS-CUTTING FUNCTIONS**

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radiological matters. The NRC and FEMA have an MOU to minimize or eliminate unnecessary duplication of effort between the two agencies.

FEMA and the NRC share involvement in the National Dam Safety Program. The primary purpose of this program is to bring together the expertise and resources of the Federal and non-Federal communities to reduce hazards associated with the Nation's dams. The NRC has regulatory authority over only uranium mill tailings dams and those dams that are integral to the operation of NRC-licensed facilities or the possession and use of NRC-licensed material, where the failure of such dams would pose a radiological hazard.

Federal Energy Regulatory Commission (FERC). The NRC and the FERC have ongoing interactions regarding issues of mutual concern, such as (1) FERC actions with respect to economic deregulation of the electric utility industry and the potential impact of FERC's deregulation activities on the NRC's mandate to protect public health and safety, and (2) the respective roles of the NRC and FERC in evaluating antitrust and market power issues arising from NRC power reactor license applicants or licensees. The NRC supports those aspects of the President's electric sector restructuring legislation that pertain to it (in particular, the elimination of NRC's duplicative role in antitrust reviews).

Department of Transportation (DOT). Under an MOU, the NRC and DOT share responsibility for developing, establishing, implementing, and enforcing consistent and comprehensive regulations and requirements for the safe transportation of radioactive and fissile materials, often through interagency committees. Generally, the NRC works with DOT to develop regulations for transporting materials, and the NRC adopts DOT requirements into its regulations.

Surface Transportation Board (STB). The NRC has an MOU with the STB (an independent agency administratively housed under DOT), which has a major Federal role with regard to the Private Fuel Storage (PFS) project. The MOU enables the STB to be a cooperating Federal agency with the NRC for the completion of the PFS environmental impact statement and implementation of follow-on activities that will continue throughout the remainder of the PFS licensing process.

Food and Drug Administration (FDA). The NRC and the FDA have an MOU that outlines procedures for sharing information of mutual interest related to the approval of medical devices, radioactive drugs, and radioactive biologics when these products contain NRC-regulated material. The NRC routinely relies on prior FDA approval of medical devices as an essential component of the agency's sealed source and device safety evaluations. The MOU also establishes procedures for notification, information sharing, and coordination of joint inspections of events related to design and manufacturing defects and failures of these devices or of radioactive drugs or radioactive biologics.

## **APPENDIX VIII: CROSS-CUTTING FUNCTIONS**

**Occupational Safety and Health Administration (OSHA).** In accordance with an MOU dated October 1988, the NRC and OSHA share responsibility for the health and safety of workers at NRC-regulated facilities. The NRC regulates worker safety with regard to radiation and chemical risks resulting from processing radioactive material, while OSHA regulates worker safety with regard to nonradiological and other industrial hazards.

**Agency for Toxic Substances and Disease Registry (ATSDR).** The NRC coordinates with ATSDR on issues that are relevant to the agency's mission to prevent exposure and human health effects and diminished quality of life associated with exposure to hazardous substances from waste sites, unplanned releases, and other sources of pollution in the environment. This coordination includes ATSDR's hazardous substances role in public health, including the impact of radioactive releases from power plants on adjacent communities' and Indian reservations' air, water, and food chain and impacts resulting from transportation of nuclear waste.

**Department of the Interior, Fish and Wildlife Service (FWS).** Under the Endangered Species Act, the NRC has responsibility to ensure that its actions protect endangered species. The NRC consults with the FWS in evaluating effects of proposed NRC actions on endangered species. If a proposed NRC action has the potential to affect endangered species, the NRC prepares a biological assessment of the effects, and the FWS renders a biological opinion. This consultation process can be extensive, as in the case of the Atlas uranium mill tailings remediation.

**Department of the Interior, Bureau of Land Management (BLM) and Bureau of Indian Affairs (BIA).** The NRC staff has signed MOU with the DOI's BLM and BIA, which each have a major Federal role with regard to the PFS project. These MOUs will enable the BLM and BIA to be cooperating Federal agencies with the NRC for the completion of the PFS environmental impact statement and implementation of follow-on activities that will continue throughout the remainder of the PFS licensing process.

**Department of Labor (DOL) and Department of Justice (DOJ).** The NRC monitors discrimination actions filed with DOL under Section 211 of the Energy Reorganization Act and develops enforcement actions where there are properly supported findings of discrimination, either from the NRC's Office of Investigations or from DOL adjudications. Suspected criminal activities concerning NRC licensees, and others within NRC's regulatory jurisdiction, are referred to DOJ. Coordination with DOJ occurs before the NRC initiates any civil enforcement action for matters under DOJ consideration for criminal prosecution.

**Department of State (DOS), Department of Defense (DoD), Agency for International Development (AID), Department of Energy, Department of Commerce (DOC).** The NRC shares responsibility with the DOS, DOE, DoD, and the AID in providing nuclear safety and safeguards assistance to other countries. DOS provides foreign policy guidance for United States Government agencies in carrying out such assistance, while the NRC actively contributes to the formulation of this guidance

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and clears its assistance programs with DOS to ensure that they are within U.S. Government policy. The NRC also shares responsibility with DOE for providing nuclear safety and safeguards assistance internationally. The NRC and DOE coordinate their efforts with each other and with other countries providing assistance to ensure that they are complementary and to avoid duplication and conflict. The National Security Council provides high-level policy guidance on key issues in the international assistance area and resolves questions that arise in providing such assistance.

The NRC, DOE, DOS, DoD, and DOC have interrelated roles in controlling exports of nuclear and nuclear-related materials, equipment, and technology. The NRC's primary role involves issuing export licenses for nuclear materials and equipment, including reactors. DOE, DOS, and DOC issue licenses or authorizations in related areas. Specifically, DOE issues licenses for nuclear technology exports and for retransfers or changes in form or content of previously exported nuclear materials and equipment; DOS issues licenses for munitions made with depleted uranium; and DOC issues licenses for nuclear reactor balance-of-plant equipment and "dual use" commodities. Each agency is obliged to consult with the others (including, if warranted, DoD) for significant cases.

The NRC, DOE, DOS, DoD, and representatives from various intelligence and investigative agencies have interrelated roles for implementing International Atomic Energy Agency (IAEA) safeguards at U.S. facilities under the U.S.-IAEA Safeguards Agreement and for providing assistance to strengthen IAEA safeguards. The NRC has responsibility for facilitating IAEA safeguards at licensee facilities and for providing technical support to IAEA's safeguards-strengthening efforts. DOS has lead responsibility for establishing foreign policy guidance and providing funding for IAEA technical support and inspection activities; DOE has responsibility for implementing IAEA's safeguards at the DOE sites and for coordinating technical support to the IAEA; and DoD and the various intelligence and investigative agencies provide oversight to ensure that national security is not degraded by IAEA safeguards activities. Coordination of United States involvements with IAEA safeguards is provided by the IAEA Steering Committee and its subordinate subcommittees and subgroups. The NRC is represented in each of these groups.

The NRC, DOE, and DOS also participate in activities to enhance domestic and global nuclear safety through other multilateral organizations such as the Organization for Economic Cooperation and Development (OECD). The mission of the OECD Nuclear Energy Agency (NEA) is to assist its member countries in maintaining and further developing, through international cooperation, the scientific, technological, and legal bases required for a safe, environmentally friendly, and economical use of nuclear energy for peaceful purposes, as well as to provide authoritative assessments and to forge common understandings on key issues, as input to Government decisions on nuclear energy policy and to broader OECD policy analyses in areas such as energy and sustainable development. The NEA is the NRC's primary multilateral organization for cooperation with countries with advanced nuclear power programs. Specific areas of NEA competence include safety and regulation of nuclear activities, radioactive waste management, radiological protection, nuclear science, economic and technical analyses of the nuclear fuel cycle, nuclear law and liability,

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and public information. The NRC senior staff participate and provide leadership in NEA technical committees addressing reactor safety inspection, research activities, and waste. In the area of advanced reactor design research, DOE provides leadership through various workshops and meetings with close cooperation of the NRC. Additionally, DOE provides leadership in radiological protection and public health activities in coordination with the NRC. DOS serves as the primary international coordinator of nuclear activities and policy formulation executed primary through NEA Steering Committee meetings.

DOE and the NRC established a cost-reimbursable agreement for the NRC to provide material protection, control, and accounting support to the regulatory agencies of Russia, the Ukraine, and Kazakhstan through the development of regulations and the licensing, inspection, and enforcement programs.

Department of Homeland Security (DHS). The NRC coordinates with DHS (along with the FEMA, FBI, and others) in responding to suspected terrorist threats or incidents involving NRC-licensed facilities or materials.

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