➤ Transportation of nuclear waste

APPENDIX B:

MANAGEMENT DECISIONS AND FINAL ACTIONS ON OIG AUDIT RECOMMENDATIONS

The agency has established and continues to maintain an excellent record in resolving and implementing open audit recommendations presented in OIG reports. Section 5(b) of the Inspector General Act of 1978, as amended, requires agencies to report on final actions taken on OIG audit recommendations. The following table gives the dollar value of disallowed costs determined through contract audits conducted by the Defense Contract Audit Agency. Because of the sensitivity of contractual negotiations, details of these contract audits are not furnished as part of this report. As of September 30, 2002, there were no outstanding audits recommending that funds be put to better use.

MANAGEMENT DECISIONS NOT IMPLEMENTED WITHIN ONE YEAR

Management decisions were made before September 2001 for the OIG audit reports discussed in the following paragraphs. As of September 30, 2002, the NRC did not take final action on some issues. However, the OIG did not recommend that funds be otherwise allocated.

NRC's License Fee Development Process Needs Improvement

December 14, 1999

The OIG recommended that the methodology for calculating the hourly rate be reevaluated to include

MANAGEMENT REPORT ON OFFICE OF THE INSPECTOR GENERAL AUDITS WITH DISALLOWED COSTS

For the Period October 1, 2001-September 30, 2002

CATEGORY	NUMBER OF AUDIT REPORTS	QUESTIONED COSTS	UNSUPPORTED COSTS
1. Audit reports with management decisions on which final action had not been taken at the beginning of this reporting period.	0	$0	$0
2. Audit reports on which management decisions were made during this period.	7	$314,667	$0
3. Audit reports on which final action was taken during this report period.	7	$314,667	$0
(i) Disallowed costs that were recovered by management through collection, offset, property in lieu of cash, or otherwise.	7	$314,667	$0
(ii) Disallowed costs that were written off by management.	0	$0	$0
4. Reports for which no final action had been taken by the end of the reporting period.	0	$0	$0

APPENDIX B

the full-cost concept as embodied in OMB Circular No. A-25, User Charges, and SSFAS Number 4 and that actual billing and cost data be used to refine future rate calculations. The NRC implemented a managerial cost accounting system in FY 2002, and cost data from this system was used as input to review the existing rate, including identification and assignment of direct and allocated indirect costs. The agency's plan for further corrective actions is under development.

Review of the Development and Implementation of STARFIRE

June 29, 2000

The OIG recommended that the definition of "significant variation" from approved costs, schedule, and performance goals for major IT projects be clarified so that senior agency managers can make informed decisions about whether or not to continue, modify, or terminate major IT projects. Variance from approved cost, schedule, and performance goals is discussed in Management Directive and Handbook 2.2, Capital Planning and Investment Control (CPIC). As part of the CPIC process lessons learned review that is currently under way, variance from approved cost, schedule, and performance goals is being further defined and clarified and alternative approaches for monitoring progress are being considered. The results will be incorporated into the revised management directive and handbook, which is expected to be issued by the end of calendar year (CY) 2003. Issuance of the revised management directive and handbook will complete agency action on the OIG's recommendations from this audit.

Review of Audit Follow-up System

August 14, 2000

The OIG recommended that the Management Directive Handbook 6.1, Resolution and Follow-up of Audit Recommendations, governing resolution and follow-up of audit recommendations be revised to reflect periodic scheduling standards for conducting analyses of audit recommendations to determine possible trends and system-wide problems and for conducting audit follow-up reviews. The NRC staff is revising the management directive handbook to include annual trend analysis reviews and biannual audit follow-up reviews. These and other revisions to improve the handbook are expected to be completed during CY 2003. Issuance of the revised management directive handbook will complete agency action on the OIG's recommendations from this audit.

Review of NRC's Differing Professional View/Differing Professional Opinion Program

September 20, 2000

The OIG recommended that Management Directive 10.159 be revised to improve the oversight and timeliness of the Differing Professional View/Differing Professional Opinion (DPV/DPO) processes, that awards be publicized for outstanding issues benefiting the agency that resulted from DPVs/DPOs, and that a special review group be convened every 3 years to assess the DPV/DPO program operations. A Special Review Panel was convened in May 2001. The review panel reviewed all DPV/DPO cases files since the last special panel met in 1994, and in December 2001 completed interviews of the NRC office directors, regional administrators, DPV/DPO filers, ad hoc panel chairs, and selected DPO/DPV panel members. The review panel analyzed and evaluated the data col-

lected through its interviews, considered the OIG's recommendations, and issued a report and recommendations in June 2002. Changes to the process in response to the review panel's recommendations have been incorporated in the revised management directive and handbook, which is expected to be issued in early CY 2003. In response to review panel recommendations, the contributions of several not previously recognized DPV/DPO filers were recognized through special act awards, which were conferred in late FY 2002 and early FY 2003. Although the revised management directive and handbook are not expected to be issued until early CY 2003, as of November 22, 2002, the OIG closed out all of the remaining recommendations related to this audit.

Special Evaluation of the Role and Structure of NRC's Executive Council

August 31, 2000

The OIG recommended that the NRC's management directives and communication mechanisms be updated to reflect the responsibilities and alignment of the Executive Director for Operations (EDO), the Chief Financial Officer (CFO), and the Chief Information Officer (CIO) after the Commission decided on a management strategy for the NRC's Executive Council. In January 2001, the Commission announced the abolishment of the Executive Council, although the EDO, CFO, and CIO continue to meet periodically. Of the 32 NRC management directives reviewed for possible revision to reflect the elimination of the Executive Council and the realignment of the responsibilities of the EDO, CFO, and CIO, 10 have been revised and published and 9 have been judged by their originating offices to need no revision. Thirteen management directives are in various stages of development, review, and concurrence and are expected to be issued during FY 2003. Issuance of the remaining 13 revised management directives will complete agency action on the OIG's recommendations from this audit.

The National Materials Program Steering Committee

December 14, 2000

The OIG recommended that the NRC define the role and responsibilities of the National Materials Program Steering Committee (NMPSC) vis-à-vis the National Materials Program Working Group and establish a requirement in the management directives that agency steering committees formally define their roles and responsibilities. The NRC issued a charter for the NMPSC in December 2000. Management Directive and Handbook 5.3, NRC and Agreement State Working Groups, was revised in July 2002 and now establishes the role and responsibilities of steering committees with respect to aiding an NRC/Agreement State Working Group to accomplish its objectives. In order to complete agency action on the OIG's recommendations from this audit, however, the NRC needs to develop a requirement in the management directives that agency steering committees formally define their roles and responsibilities. This is planned for completion before the end of CY 2003.

Review of NRC's Quality Assurance Process for Official Documents

February 23, 2001

The OIG recommended that the NRC improve its quality assurance process for official documents by revising Management Directive and Handbook 3.57,

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Correspondence Management. Specifically, the OIG recommended that the NRC clearly establish the responsibilities of the document originator and concurrence chain reviewers with regard to accuracy of final products and to set clear expectations for document originators concerning fact-checking methods and provide clear expectations for the NRC staff to heighten awareness of the importance of information accuracy. Interim NRC policy guidance on ensuring the technical accuracy and readability of the NRC's documents and correspondence was issued to all NRC employees in May 2001. A revision of Management Directive and Handbook 3.57, incorporating this policy and other needed updates, is expected to be issued in late FY 2003, which will complete agency action on the OIG's recommendations from this audit.

Government Performance and Results Act:Review of the FY 1999 Performance Report

February 23, 2001

The OIG recommended that the NRC develop the management control procedures needed to produce valid and reliable performance data. Interim guidance for performance management and reporting performance information was issued in July 2001. The NRC staff drafted a new management directive and handbook during FY 2002, which is circulating for review and comment. The new management directive is expected to issued by the end of 2003, which will complete agency action on the OIG's recommendations from this audit.

Review of NRC's Website Privacy Policy: Internet Cookies

February 16, 2001

The OIG recommended that the NRC develop written policy guidance to establish management controls over and prohibit the NRC and third-party contractors from collecting personally identifiable information from visitors to the NRC Website. The NRC issued interim guidance on the NRC's Website privacy policy in November 2001, which prohibits the NRC and its third-party contractors to send persistent Internet cookies, place persistent cookies on users' computers, or collect personally identifiable information from visitors to the NRC Website (with some exceptions). This policy has been incorporated in a revision of Management Directive and Handbook 3.14, U.S. Nuclear Regulatory Commissions External Web site, which is expected to be issued in mid-FY 2003. Issuance of this revised management directive and handbook will complete agency action on the OIG's recommendations from this audit.

Review of NRC's Workforce Planning

September 24, 2001

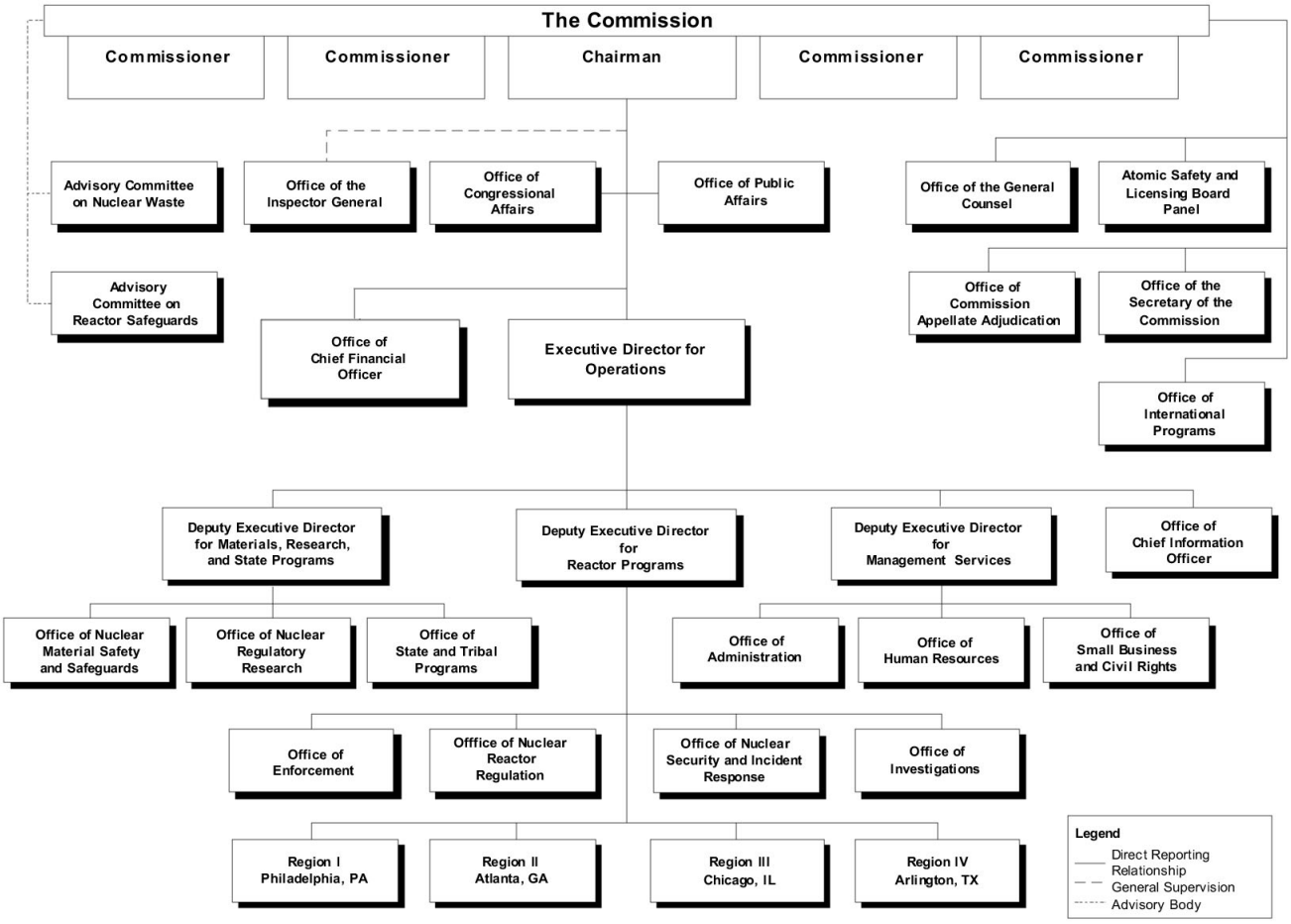
The OIG recommended that the NRC integrate, communicate, and institutionalize workforce planning at the NRC. During FY 2002, the agency developed and began implementing an iterative, agencywide workforce planning process that obtains skills and competency needs forecasts at the beginning of each budget cycle, compares these to current and projected skills availability data to identify gaps, and factors resources needs to carry out gap-closure strategies into the budget. This approach for addressing the NRC's human capital needs was first imple-

mented as part of the FY 2003 PBPM process. A plan addressing the types and timing of communications required to provide the right information on the workforce planning approach at the right time to targeted internal stakeholders was developed and implemented. A committee of the NRC's Executive Resources Board was chartered to serve in an oversight role to periodically review the strategic workforce planning process and gauge its effectiveness. A multidisciplinary team comprised of a core group from the Office of Human Resources and representatives from every NRC office and region was established to coordinate workforce planning activities and serve as a communications link at all levels of the agency. Although these agency actions were implemented before the end of FY 2002, full integration of workforce planning in the PBPM process and establishment of workforce planning performance measures, were not documented as completed until after the end of the fiscal year. Agency action on the OIG's recommendations from this audit was complete as of October 2002.

➤ NRC employees confer outside NRC headquarters building

APPENDIX C
ORGANIZATIONAL CHART

NRC ORGANIZATIONAL CHART AS OF SEPTEMBER 30, 2002



➤ McGuire Nuclear Power Plant, Charlotte, North Carolina

APPENDIX D
GLOSSARY OF ACRONYMS

ACR	Advanced Candu Reactor
ADAMS	Agencywide Documents Access and Management System
AID	Agency for International Development
AO	abnormal occurrence
ASLBP	Atomic Safety and Licensing Board Panel
ASP	accident sequence precursor
CEE	Central and Eastern Europe
CFO	Chief Financial Officer
CFR	Code of Federal Regulations
CIA	Central Intelligence Agency
CIO	Chief Information Officer
CNS	Convention on Nuclear Safety
CPIC	capital planning and investment control
CRCPD	Conference of Radiation Control Program Directors
CSRS	Civil Service Retirement System
CY	calendar year
DCS	Duke, Cogema, Stone & Webster
DMP	Decommissioning Management Plan
DOE	Department of Energy
DOL	Department of Labor
DOT	Department of Transportation
EA	Enterprise Architecture
EDO	Executive Director for Operations
E-Gov	electronic Government
EIA	Energy Information Administration
EIE	Electronic Information Exchange
FACTS I	Federal Agencies' Centralized Trial Balance System
FAIR	Federal Activities Inventory Reform
FBI	Federal Bureau of Investigations
FECA	Federal Employees Compensation Act
FERS	Federal Employees Retirement System
FFMIA	Federal Financial Management Improvement Act
FFS	Federal Financial System
FICA	Federal Insurance Contribution Act
FMFIA	Federal Managers' Financial Integrity Act of 1982
FSU	Former Soviet Union
FY	fiscal year
GAO	General Accounting Office
GISRA	Government Information Security Reform Act
GPEA	Government Paperwork Elimination Act
GPRA	Government Performance and Results Act
GSA	General Services Administration
GTMHR	Gas Turbine Modular Helium Reactor
HEU	Highly-Enriched Uranium
HLW	High-Level Waste

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HLW-EHD High-Level Waste Electronic Hearing Docket

HRMS Human Resources Management System

I & C Instrument and Control

IAEA International Atomic Energy Agency

ICMs Interim Compensatory Measures

IMPEP Integrated Materials Performance Evaluation Program

Improvement Act Federal Management Improvement Act of 1996

Integrity Act Federal Managers' Financial Integrity Act of 1982

IPAC Intra-Government Payment and Collection

IRIS International Reactor Innovative and Secure

IRSR Issue Resolution Status Report

IT Information Technology

LPP Leadership Potential Program

LSN Licensing Support Network

MC Manual Chapter

MOU Memorandum of Understanding

MOX Mixed-Oxide Fuel

MRB Management Review Board

MUR Measurement Uncertainly Recapture

MWe Megawatts Electric

NARA National Archives and Records Administration

NMED Nuclear Materials Event Database

NMPSC National Materials Program Steering Committee

NMSS Office of Nuclear Materials Safety and Safeguards

NRC Nuclear Regulatory Commission

NRR Office of Nuclear Reactor Regulation

NSIR Office of Nuclear Security and Incident and Response

NWPA Nuclear Waste Policy Act of 1982

OAS Organization of Agreement States

OCFO Office of the Chief Financial Officer

OIG Office of the Inspector General

OMB Office of Management and Budget

OPM Office of Personnel Management

PBPM Planning, Budgeting, and Performance Management

PFS Private Fuel Storage, LLC's

PI Performance Indicator

PRB Petition Review Board

PWR Pressurized-Water Reactor

RCC Rulemaking Coordinating Committee

REIRS Radiation Exposure Information Report System

RIRIP Risk-Informed Regulation Implementation Plan

ROP Reactor Oversight Process

RPV	Reactor-Pressure Vessel
RTA	Response to Terrorist Attacks
RTG	Risk Task Group
SCSS	Sequence Coding and Search System
SDMP	Site Decommissioning Management Plan
SES	Senior Executive Service
SFFAS	Statements of Federal Financial Accounting Standards
SFFAS	Number 4 Managerial Cost Accounting Concepts and Standards for the Federal Government
SFFAS	Number 10 Accounting for Internal Use Software
SS&D	Sealed-Source And Device
TSP	Thrift Savings Plan
USEC	United States Enrichment Corporation
YMRP	Yucca Mountain Review Plan

ENDNOTES

Endnotes for Nuclear Reactor Safety section

1. The information in the subject graphs is based entirely on fiscal year data. Because of an administrative error, the graphs included with the FY 2001 report provided both calendar year data (through 1995) and fiscal year data (thereafter). In addition, performance indicator results are subject to minor variations when licensees submit revisions to the source data. These revisions also resulted in small changes to the FY 2000 data provided in the FY 2001 report.
2. "Nuclear reactor accidents" are defined in the NRC Severe Accident Policy Statement (50 Federal Register 32138, August 8, 1985) as those events that result in substantial damage to the reactor fuel, whether or not serious offsite consequences occur. **Data sources and verification:** The NRC requires licensees to notify the NRC Operations Center of the declaration of any emergency specified in the licensee's NRC approved Emergency Plan. Further, notifications are required for those non-emergency events specified in the regulations. The NRC periodically evaluates licensee compliance with notification regulations. In addition, NRC resident inspectors are aware of the events that occur at nuclear plants.
3. **Data sources and verification:** The NRC requires licensees to report radiation exposures to the NRC. The NRC periodically evaluates licensee compliance with the reporting criteria and radiological release criteria. A resident inspector monitors the facility and would be aware of deaths resulting from acute radiation exposures.
4. "Significant radiation exposures" are defined as those that result in unintended permanent functional damage to an organ or a physiological system as determined by a physician in accordance with Abnormal Occurrence Criterion I.A.3. **Data sources and verification:** The NRC requires licensees to report radiation exposures to the NRC. The NRC periodically assesses licensee compliance with the reporting criteria and radiological release criteria. A resident inspector monitors the facility and would be aware of significant radiation exposures.
5. **Data sources and verification:** Licensees are required to call the NRC to report any breaches of security or other event that may potentially lead to sabotage at a nuclear facility within one hour of that occurrence. Information assessment teams would follow-up any significant events. The licensee would also file a written report within thirty days of such an event. The investigation would verify the accuracy of the information.
6. Releases that have the potential to cause "adverse impact" are currently undefined. As a surrogate, we use those that exceed the limits for reporting abnormal occurrences as given by Abnormal Occurrence Criterion 1.B.1 (normally 5,000 times Table 2 (air and water) of Appendix B, Part 20). **Data sources and verification:** The NRC requires licensees to report radiation exposures to the NRC. The NRC periodically assesses licensee compliance with the reporting criteria and radiological release criteria. A resident inspector monitors the facility and would be aware of instances in which radiation is released from the reactor in excess of reporting limits.
7. The agency provides oversight of plant safety performance on a plant-specific basis as well as on an industry-wide basis. As a refinement to the existing process, the specific parameters and criteria for measuring statistically significant adverse trends in industry-wide safety performance will be developed. The parameters to be monitored will include NRC-approved performance indicators, inspection findings, accident sequence precursor results, and other risk-related indications or measures of industry safety performance that will be developed and qualified for use in phases. **Data sources and verification:** The NRC monitors industry safety performance through its reactor oversight process. Licensees are required to file reports

that contain operational and event information. NRC Inspections confirm that these reports are complete and reliable.

➤ 8. Such events have a 1/1000 (10-3) or greater probability of leading to a nuclear reactor accident. **Data sources and verification:** The NRC's Accident Sequence Precursor program (ASP) systematically evaluates operating experience to identify, document, and rank events that have the potential to cause core damage. A computer screening of licensee event reports or other events designated by NRC staff identifies these events. Selected events then undergo an engineering evaluation to identify, analyze, and document precursor events. A preliminary analysis of potential precursor events is submitted for independent peer review by licensees and NRC staff to ensure that the plant design and its response to the precursor event are correctly characterized.

➤ 9. Overexposures are those that exceed limits as provided by 10 CFR 20.2203(a)(2), excluding instances of overexposures involving a shallow dose equivalent from a discrete radioactive particle in contact with the skin. **Data sources and verification:** Licensees are required to file reports that contain information on events of radiation exposure to an individual. Inspections confirm that event reports are complete and reliable. In addition, areas of a nuclear facility that may be subject to radioactive contamination have monitors that record radiation levels. Any occurrence of radioactive levels exceeding regulatory limits would be identified.

➤ 10. These are releases for which a 30-day reporting requirement under 10 CFR 20.2203(a)(3) applies. **Data sources and verification:** Licensees are required to file reports that contain information on events of excess radiation exposure or concentrations of radioactive material. The NRC conducts inspections of licensees to ensure that releases to the environment through effluent pathways are being properly monitored and controlled. Any instance in which radiation had been released to the environment would be recorded on monitors and a follow-up investigation would be conducted.

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

➤ 12. Three events were identified in FY 2002 as having the potential of being "siginificant" precursors. The preliminary results of the Accident Sequence Precursor Program analysis show that a design deficiency that existed at both units at a multi-unit site does not meet the "siginificant" precursor criteria. The analysis is undergoing peer review. Another potentially "significant" precursor involved a reactor pressure vessel head degradation. The detailed Accident Sequence Precursor Program analysis of this event is ongoing. Based on the above preliminary analysis, the second performance measure was not exceeded for FY 2002.

➤ 13. A 10 CFR 2.206 petition is a written request filed by any person to institute a proceeding to modify, suspend, or revoke a license, or for any other enforcement action. The petition specifies the action requested and sets forth the facts that constitute the basis for the request. The NRC evaluates the technical merits of the safety concern presented by the petition. Based on the facts determined by the NRC technical evaluation or investigation of the merits of the petition, the Director will issue a decision to grant the petition, in whole or in part, or deny the petition. The Director's Decision explains the bases upon which the petition has or has not been granted or denied and identifies the actions that NRC staff has taken or will take in response to the petition.

➤ 14. The start time of the 120 days is the date that the Petition Review Board (PRB) determines that the proposed petition satisfies the criteria of NRC Management Directive 8.11, Review Process for 10 CFR 2.206 Petitions, and acknowledges by letter the petitioner's

request. For petitions received after October 1, 2000, the end time is the date of the proposed Director's Decision. Supplements to the petition, which require extension of the schedule, will reset the beginning of the metric to the date of a new acknowledgment letter.

Endnotes for Nuclear Materials section

1. The measure results are actual data that the NRC and Agreement States received as of November 2002, and the analysis of these data is complete. However, the NRC and Agreement States may still receive data from licensees (which occurred during FY 2002), which will be reported in the following years Performance and Accountability Report.
2. **Data source and verification:** Events resulting in deaths could be reported to the NRC and/or Agreement States through a number of sources, but primarily through required licensee notifications. These events are summarized in Event Notifications and Preliminary Notifications that are used to disseminate the information widely to the appropriate managers and staff. For Nuclear Materials Safety arena activities, the Nuclear Materials Event Database (NMED) is an essential system used to collect information on such events. For fuel cycle activities, this extends to other hazardous materials used with, or produced from licensed material consistent with 10 CFR Part 70. The decision on whether or not to ascribe the cause of a death to conditions related to acute radiation exposures, or other hazardous materials, will be made by NRC or Agreement State technical specialists, or our consultants. The fuel cycle and materials inspection programs are key elements in verifying the completeness and accuracy of licensee reports. The Integrated Materials Performance Evaluation Program (IMPEP) also provides a mechanism to verify that Agreement States and NRC regions are properly collecting and reporting such events as received from the licensees, and entering them into NMED.
3. Significant exposures are defined as those that result in unintended permanent functional damage to an organ or a physiological system as determined by a physician. Hazardous material (as defined by the Occupational Safety and Health Administration) exposures only apply to fuel cycle and uranium recovery activities in the Nuclear Materials Safety arena. **Data source and verification:** Events meeting this threshold would be reported to the NRC and/or Agreement States through a number of sources but primarily through required licensee notifications. Event Notifications and Preliminary Notifications are used to communicate this information internally. For Nuclear Materials Safety arena activities, the NMED is an essential system used to collect information on such events. Significant exposures are defined as those that result in unintended permanent functional damage to an organ or a physiological system as determined by a physician, as agreed upon by NRC or Agreement State technical specialists or our consultants. Hazardous material exposures only apply to fuel cycle activities in the Nuclear Materials Safety arena. For fuel cycle activities, this extends to other hazardous materials used with, or produced from, licensed material consistent with 10 CFR Part 70. The fuel cycle and materials inspection programs are key elements in verifying the completeness and accuracy of licensee reports. The IMPEP also provides a mechanism to verify that Agreement States and NRC regions are properly collecting and reporting such events as received from the licensees, and entering them into NMED.
4. Releases that have the potential to cause “adverse impact” are currently undefined. As a surrogate, we will use those that exceed the limits for reporting abnormal occurrences as given by abnormal occurrence criteria 1.B.1 (normally 5,000 times Table 2 (air and water) of Appendix B, Part 20). This information is available in the Abnormal Occurrence (AO) Report to Congress, NUREG-0090.

Data source and verification: Events meeting this threshold would be reported to the NRC and/or Agreement States through a number of sources, but primarily through required licensee notifications. Event Notifications and Preliminary Notifications are used to communicate this information internally. For Nuclear Materials Safety arena activities, the NMED is an essential system used to collect information on such events. Releases that have the potential to cause "adverse impact" are currently undefined. As a surrogate, we will use those that exceed the limits for reporting AOs as given in AO criteria 1.B.1. The fuel cycle and materials inspection programs are key elements in verifying the completeness and accuracy of licensee reports. The IMPEP also provides a mechanism to verify that Agreement States and NRC regions are properly collecting and reporting such events as received from the licensees, and entering them into NMED.

➤ 5. In accordance with Appendix G to 10 CFR Part 73 and 10 CFR 74.11(a). **Data source and verification:** Licensees are required to report events in which there are losses, thefts, or diversions of formula quantities of strategic special nuclear material; radiological sabotages; or unauthorized enrichment of special nuclear material regulated by the NRC to the NRC Headquarters Operations Center within one hour of their occurrence. The licensee is also required to file a follow-up written report within 30 days of the event to the NRC. The report must include sufficient information for NRC analysis and evaluation. Events are entered and tracked in the NMED. The NRC initiates independent investigations that verify the reliability of reported information. NRC investigation teams evaluate the validity of materials event data, in order to assure that proper event data is being reported and collected. Any failures of appropriate licensee reporting would be discovered through the routine inspection program. The NRC holds periodic meetings to validate previously screened events.

➤ 6. In accordance with the requirements of 10 CFR 95.57. **Data source and verification:** Any alleged or suspected violations of the Atomic Energy Act, Espionage Act, or other Federal statutes related to classified information are reported to the NRC under the requirements of 10 CFR 95.57. However, for performance reporting, the NRC only counts those disclosures or compromises that actually cause damage to national security. Such events are reported to the Cognizant Security Agency (i.e., the security agency with jurisdiction) and the Regional Administrator of the appropriate NRC Regional Office, as listed in Appendix A of 10 CFR Part 73. The Regional Administrator then contacts the Division of Facilities and Security at NRC headquarters. The Division of Facilities and Security assesses the violation and notifies other offices at the NRC as well as other government agencies, as appropriate. A determination is then made as to whether the compromise caused damage to national security. Any unauthorized disclosures or compromises of classified information causing damage to national security would result in immediate investigation and follow up by the NRC.

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

➤ 8. Reportable events of material entering the public domain in an uncontrolled manner as reported under 10 CFR 20.2201(a)(1)(i) and (ii). The NMED contains the list of these events as reported by the NRC licensees and, through the Agreement States, the Agreement State licensees. **Data sources and verification:** Events meeting this threshold would be reported to the NRC and/or Agreement States through a number of sources but primarily through licensee notifications. The materials inspection program is a key element in verifying the completeness and accuracy of licensee reports.

➤ 9. **Data sources and verification:** Licensees immediately report criticality events to the NRC Operations Center by telephone. Licensees fol-

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low up written reports are required to be submitted to NRC within 30 days of the initial report. These reports must contain specific information describing the event as required by NRC regulations. The NRC will dispatch an Augmented or Incident Inspection Team depending on the severity of accident to confirm the reliability of the report. An event of this nature is immediately investigated and followed up.

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

➤ 11. Overexposures are those exposures that exceed the dose limits as specified in 10 CFR 20.2203(a)(2) as tracked in NMED. For fuel cycle activities, this extends to other hazardous materials used with, or produced from, licensed material, consistent with 10 CFR Part 70. Reportable chemical exposures are those that exceed license commitments. It would also include chemical exposures involving uranium recovery activities under the Uranium Mill Tailings Radiation Control Act. Multiple people may be affected by a single causal event. **Data sources and verification:** Events meeting this threshold would be reported to the NRC and/or Agreement States through a number of sources but primarily through licensee notifications. The materials inspection program is a key element in verifying the completeness and accuracy of licensee reports. The Integrated Materials Performance Evaluation Program also verifies the accuracy of the reported events.

➤ 12. Medical events (misadministrations) as reported under 10 CFR Part 35, as tracked in NMED. Multiple patients may be affected by a single causal event. **Data sources and verification:** Events meeting this threshold would be reported to the NRC and/or Agreement States through a number of sources but primarily through licensee notifications. The materials inspection program is a key element in verifying the completeness and accuracy of licensee reports.

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

➤ 14. Events that meet this measure are reportable under 10 CFR 20.2203(a)(3)(ii). These events must document actual releases of material; reportable events involving radiation fields will not be counted under this measure. This measure also includes chemical releases from regulated activity under the Uranium Mill Tailings Radiation Control Act. **Data sources and verification:** Events meeting this threshold would be reported to the NRC and/or Agreement States through a number of sources but primarily through licensee notifications. The materials inspection program is a key element in verifying the completeness and accuracy of licensee reports.

➤ 15. Malevolent use is defined as the deliberate misuse of radioactive materials with the intent to cause physical or psychological harm to a person or persons, or to cause physical damage to a facility or to the environment. NRC evaluates intentional violations and deliberations acts against this definition. **Data sources and verification:** Events meeting this threshold would be reported to the NRC and/or Agreement States through a number of sources but primarily through licensee notifications. The NRC responds to either a licensee report or allegation by initiating an independent investigation to verify the validity of the data.

➤ 16. NRC recognizes that no explicit reporting requirements exist for substantiated breakdowns of programs. The NRC relies on its safeguards inspection findings and licensee notifications. **Data sources and verification:** Events as described above must be recorded within 24 hours in a safeguards log maintained by the licensee. The NRC relies on its safeguards inspection program to help validate the reliability of the recorded data and determine whether a breakdown of a physical protection or material control and accounting system has, in actuality, resulted in a vulnerability. The NRC also evaluates the data in order to assure that the proper event data are being reported and collected.

17. This involves chemical releases from NRC regulated activities under the Uranium Mill Tailings Radiation Control Act. **Data sources and verification:** Events meeting this threshold would be reported to the NRC and/or Agreement States through a number of sources but primarily through licensee notifications. The materials inspection program is a key element in verifying the completeness and accuracy of licensee reports. Releases that cause impacts to the environment that cannot be mitigated within applicable regulatory limits using reasonably available methods are not readily defined. The expert judgment of NRC personnel and that of other agencies, such as the EPA, are relied upon to make that determination. Events of this magnitude would result in prompt and thorough investigation.

Endnotes for Nuclear Waste section

1. The measure results are actual data that the NRC and Agreement States received as of November 2002, and the analysis of these data is complete. However, the NRC and Agreement States may still receive data from licensees (which occurred during FY 2002), which will be reported in the following years Performance and Accountability Report.

2. **Data source and verification:** Events meeting this threshold are reported to the NRC and/or Agreement States primarily through required licensee notifications, though other sources may also report events. These events are summarized in Event Notifications and Preliminary Notifications that are used to widely disseminate the information to the appropriate managers and staff. The reports are entered into the NMED for tracking and evaluation purposes. The decision on whether to ascribe the cause of a death to conditions related to acute radiation exposures will be made by NRC or Agreement State technical specialists, or our consultants. The IMPEP provides a mechanism to verify that Agreement States and NRC regions are properly collecting and reporting such events as received from the licensees, and entering them into NMED.

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

3. Significant radiation exposures are defined as those that result in unintended permanent functional damage to an organ or a physiological system as determined by a physician. **Data sources and verification:** Significant exposures are defined as those that result in unintended permanent functional damage to an organ or a physiological system as determined by a physician, as agreed upon by NRC or Agreement State technical specialists, or our consultants. Events meeting this threshold are reported to the NRC and/or Agreement States primarily through required licensee notifications, though other sources may also report events. Event Notifications and Preliminary Notifications are used to communicate this information internally. The reports are entered into the NMED for tracking and evaluation purposes. The IMPEP provides a mechanism to verify that Agreement States and NRC regions are properly collecting and reporting such events as received from the licensees, and entering them into NMED.

   Any event resulting in an unintended permanent function damage to an organ or physiological system compromises public health and safety. Events of this magnitude are not expected and would be rare. If such an event were to occur, it would result in prompt and thorough investigation of the event, its consequences, its root causes, and the necessary actions needed by the licensee and NRC to mitigate the situation and prevent recurrence. In addition to these immediate actions, the NRC holds periodic meetings where staff and management will validate previously screened events.

ENDNOTES

4. Releases that have the potential to cause "adverse impact" are currently undefined. As a surrogate, we will use those that exceed the limits for reporting abnormal occurrences as given by AO criteria 1.B.1 (normally 5,000 times Table 2 (air and water) of Appendix B, Part 20). This information is available in the Abnormal Occurrence Report to Congress, NUREG-0090, which can be located at http://www.nrc.gov/NRC/NUREGS/SR0090/V22/sr0090V22.pdf. **Data sources and verification:** Releases of radioactive waste that have the potential to cause an adverse impact on the environment are currently undefined. Therefore, for this performance measure, releases that exceed the limits for reporting AOs as given in AO criteria 1.B.1 are counted as releases that cause an adverse impact on the environment. Events meeting this threshold are reported to NRC and/or Agreement States primarily through required licensee notifications, though other sources may also report events. Event Notifications and Preliminary Notifications are used to communicate this information internally. The reports are entered into the NMED for tracking and evaluation purposes. The IMPEP provides a mechanism to verify that Agreement States and NRC regions are properly collecting and reporting such events as received from the licensees, and entering them into NMED.

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

5. In accordance with Appendix G to 10 CFR Part 73 and 10 CFR 74.11(a). **Data source and verification:** Licensees report events that entail losses, thefts, diversions, or radiological sabotage of special nuclear material or radioactive waste within one hour of their occurrence to the NRC Headquarters Operations Center. A follow up written report must be submitted within 30 days of the event to the NRC. The report must include sufficient information for NRC analysis and evaluation. The NRC also initiates an independent investigation of the reported event. Events are entered and tracked by the NMED. Any strategic plan failure results in immediate investigation and follow up and is tracked in the Safeguards Summary Event List Database. Any lack of appropriate licensee reporting would be discovered through the routine inspection program. The NRC holds periodic meetings where staff and management will validate previously screened.

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

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

7. **Data sources and verification:** Events meeting the regulatory threshold are reported to the NRC and/or Agreement States primarily through required licensee notifications, though other sources may also report events. The Integrated Materials Performance Evaluation Program (IMPEP) reviews provide a mechanism to verify that Agreement States and NRC regions are properly collecting and reporting such events as received from the licensees, and that they are being correctly entered into the NRC's Nuclear Materials Events Database.

- 8. NRC recognizes that no explicit reporting requirements exist for substantiated breakdown determination. The NRC relies on its safeguards inspection findings and licensee notifications.
- 9. **Data sources and verification:** Events as described above must be recorded within 24 hours of the identified event in a safeguards log that is maintained by the licensee. No explicit reporting requirements exist for substantiated breakdowns of physical protection. The NRC relies on its safeguards inspection program to help validate the reliability of recorded data and determine whether a breakdown of a physical protection system has, in actuality, resulted in a vulnerability. The NRC also evaluates the event data in order to assure that the proper event data is being reported and collected.
- 10. Releases for which a 30 day reporting requirement under 10 CFR 20.2203(a)(3) is required.
- 11. **Data sources and verification:** Radiological releases to the environment from operational activities that exceed the regulatory limits are required to be reported within 30 days under 10 CFR 20.2203(a)(3). Events meeting this threshold are reported to the NRC and/or Agreement States primarily through required licensee notifications, though events may also be reported by other sources. The reports are entered into the NMED for tracking and evaluation purposes. The IMPEP provides a mechanism to verify that Agreement States and NRC regions are properly collecting and reporting such events as received from the licensees, and entering them into NMED.
- 12. Measuring the protection of future generations over the planning period of the next five years is a unique challenge that the Commission is continuing to evaluate.
- 13. **Data sources and verification:** The NRC monitors events and issues related to the safe use, transport, storage, and disposal of radioactive waste and materials that are reported to the Commission in accordance with existing regulations. The NRC monitors events that might indicate a licensee's or licensee's contractor's current or future inability to perform a required function or activity in a safe manner. Any event, condition or substantiated allegation formally reported to the NRC is evaluated for safety impact and potential generic implications. In FY 2001, the NRC completed a review of formerly terminated licensed sites with potential contamination that could require cleanup and disposal. The NRC identifies a responsible party that will need to clean up such sites and works with the party to facilitate cleanup.
- 14. All of the public outreach meetings were held as scheduled. Three meetings were held in Nevada in April 2002 on health and safety issues associated with a possible licensing decision on a HLW repository, and three meetings were held in May 2002 on the Yucca Mountain Review Plan. An open house was held at the NRC office in Las Vegas, Nevada in September 2002 to discuss the U. S. NRC On-Site Representatives' role for regulating the safety of the proposed radioactive waste repository at Yucca Mountain. Part 71 public meetings were held in Rockville, MD on 6/4/02 and Chicago, IL on 6/24/02.
- 15. A 10 CFR 2.206 petition is a written request filed by any person to institute a proceeding to modify, suspend, or revoke a license, or for any other enforcement action. The petition specifies the action requested and sets forth the facts that constitute the basis for the request. The NRC evaluates the technical merits of the safety concern presented by the petition. Based on the facts determined by the NRC technical evaluation or investigation of the merits of the petition, the Director will issue a decision to grant the petition, in whole or in part, or deny the petition. The Director's Decision explains the bases upon which the petition has or has not been granted or denied and identifies the actions that NRC staff has taken or will take in response to the petition.

ENDNOTES

16. The start time of the 120 days is the date that the Petition Review Board (PRB) determines that the proposed petition satisfies the criteria of NRC Management Directive 8.11, Review Process for 10 CFR 2.206 Petitions, and acknowledges by letter the petitioner's request. For petitions received after October 1, 2000, the end time is the date of the proposed Director's Decision. Supplements to the petition that require extension of the schedule will reset the beginning of the metric to the date of a new acknowledgment letter.
17. Prelicensing activities constitute informal conferences between a prospective applicant and the staff and are not part of a potential licensing proceeding.

Endnotes for International Safety section

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.
2. Significant incidents are incidents that would include a loss by theft or diversion of 1 or more kilograms of weapons grade uranium or plutonium, the detonation by a non-nuclear weapon state of a nuclear explosive device, or the abrogation of Nuclear Nonproliferation Treaty safeguard commitments by a non-nuclear weapon state.
3. Under section 123 of the Atomic Energy Act of 1954, as amended, requires agreements for Cooperation in the Civil/Peaceful Use of Nuclear Energy 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 the NRC can issue an export license.

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