OFFICE OF THE INSPECTOR GENERAL

U.S. NUCLEAR REGULATORY COMMISSION

Audit of NRC's Decommissioning Program

OIG-05-A-17 September 21, 2005

AUDIT REPORT



All publicly available OIG reports (including this report) are accessible through NRC's Web site at:

http://www.nrc.gov/reading-rm/doc-collections/insp-gen/

September 21, 2005

MEMORANDUM TO: Luis A. Reyes

Executive Director for Operations

FROM: Stephen D. Dingbaum/RA/

Assistant Inspector General for Audits

SUBJECT: AUDIT OF NRC'S DECOMMISSIONING PROGRAM

(OIG-05-A-17)

Attached is the Office of the Inspector General's (OIG) audit report titled, *Audit of NRC's Decommissioning Program*. This audit found that while NRC's decommissioning program has processes in place to monitor, evaluate and report on performance,--

- A. OIG was able to verify some performance results, but was unable to verify others; and
- B. the decommissioning program implemented most *Program Evaluation of Changes to the Decommissioning Program* recommendations, but has made minimal progress to implement a few others.

During an exit conference held August 3, 2005, the agency generally agreed with the recommendations in this audit report and on September 13, 2005 provided formal comments concerning the draft audit report. We modified the report as we determined appropriate in response to these comments.

If you have any questions, please call Anthony Lipuma at 415-5910 or me at 415-5915.

Attachment: As stated

Distribution

John T. Larkins, Executive Director, Advisory Committee on Reactor Safeguards/Advisory Committee on Nuclear Waste

G. Paul Bollwerk, III, Chief Administrative Judge, Atomic Safety and Licensing Board Panel

Karen D. Cyr, General Counsel

John F. Cordes, Jr., Director, Office of Commission Appellate Adjudication

Jesse L. Funches, Chief Financial Officer

Janice Dunn Lee, Director, Office of International Programs

William N. Outlaw, Director of Communications

William N. Outlaw, Acting Director, Office of Congressional Affairs

Eliot B. Brenner, Director, Office of Public Affairs

Annette Vietti-Cook, Secretary of the Commission

William F. Kane, Deputy Executive Director for Reactor

and Preparedness Programs, OEDO

Martin J. Virgilio, Deputy Executive Director for Materials, Research, State and Compliance Programs, OEDO

Jacqueline E. Silber, Deputy Executive Director for Information Services and Administration, and Chief Information Officer, OEDO

William M. Dean, Assistant for Operations, OEDO

Timothy F. Hagan, Director, Office of Administration

Michael R. Johnson, Director, Office of Enforcement

Guy P. Caputo, Director, Office of Investigations

Edward T. Baker, Director, Office of Information Services

James F. McDermott, Director, Office of Human Resources

Corenthis B. Kelley, Director, Office of Small Business and Civil Rights

Jack R. Strosnider, Director, Office of Nuclear Material Safety and Safeguards

James E. Dyer, Director, Office of Nuclear Reactor Regulation

Carl J. Paperiello, Director, Office of Nuclear Regulatory Research

Paul H. Lohaus, Director, Office of State and Tribal Programs

Roy P. Zimmerman, Director, Office of Nuclear Security and Incident Response

Samuel J. Collins, Regional Administrator, Region I

William D. Travers, Regional Administrator, Region II

James L. Caldwell, Regional Administrator, Region III

Bruce S. Mallett, Regional Administrator, Region IV

EXECUTIVE SUMMARY

BACKGROUND

NRC continues to regulate commercial nuclear reactors, fuel cycle facilities, and NRC material licensees after they are permanently shut down and begin decommissioning. During reactor decommissioning, NRC conducts inspections, processes license amendments (including approval of the License Termination Plan), and monitors the status of activities. NRC also regulates the decommissioning of materials facilities by reviewing decommissioning plans, conducting inspections, and monitoring the status of activities to assure that radioactive contamination is reduced or stabilized. This monitoring system assures that safety requirements are being met throughout the decommissioning process. The Office of Nuclear Materials Safety and Safeguards (NMSS), oversees power reactor decommissioning² once certain licensing actions are completed and materials license decommissioning regulatory activities.

To ensure that Federal agencies achieve program results, Congress passed the Government Performance and Results Act of 1993 (GPRA). The Office of Management and Budget (OMB) developed the Program Assessment Rating Tool (PART) to—

- 1. assess and improve program performance so that the Federal government can achieve better results, and
- 2. provide a sound basis for budget and management decisions.

PART builds on GPRA by encouraging agencies to integrate operational decisions with strategic and performance planning. It is a diagnostic tool intended to systematically and consistently assess the performance of program activities across the Federal government.

¹ NRC defines decommissioning as removing a facility or site safely from service and reducing residual radioactivity to a level that permits (1) release of the property for unrestricted use and termination of the license; or (2) release of the property under restricted conditions and termination of the license.

² NMSS currently oversees 13 power reactors undergoing decommissioning. Project management for oversight of the remaining power and demonstration reactors undergoing decommissioning has been retained by the Office of Nuclear Reactor Regulation.

PURPOSE

NRC's FY 2006 performance plan identified Decommissioning and Low-Level Waste as a program scheduled to be reviewed using PART for Budget Year 2008. Because this program will be subject to a PART review in FY 2006, agency managers requested OIG to review the decommissioning program.

The objective of the audit was to determine whether NRC's decommissioning program achieves desired performance results as stated in the Agency's *Strategic Plan* and reported in the *Performance and Accountability Report.* That is –

- 1. Verify whether the Program achieves its performance results; and
- 2. Determine whether NRC's decommissioning program staff implemented recommendations made in the *Program Evaluation of Changes to the Decommissioning Program* to improve program performance.

RESULTS IN BRIEF

The decommissioning program evaluates its effectiveness by using outcome, performance and output measures contained in the Agency's strategic and performance plans. Additionally, an FY 2003 self-evaluation resulted in 21 recommendations intended to improve the Program's effectiveness and efficiency. While NRC's decommissioning program has processes in place to monitor, evaluate and report on performance,--

- A. some performance results were verified, but OIG was unable to verify others; and
- B. the decommissioning program implemented most *Program Evaluation* recommendations, but has made minimal progress to implement a few others.

A. Some Performance Results Verified, Unable to Verify Others

As required by GPRA, some decommissioning program performance results were verifiable. However, OIG was unable to verify all reported results. This problem occurred because responsible staff members did not maintain adequate supporting documentation. Without adequate supporting documentation,

reported performance results cannot be verified. Specifically, NRC—

- cannot confirm that program goals are met,
- cannot be sure conclusions about the effectiveness of the program are reliable, and,
- independent evaluators would not have data needed to verify and validate the program's performance results.

B. Most *Program Evaluation* Recommendations Implemented, Minimal Progress on a Few

While most recommendations made in the *Program Evaluation of Changes to the Decommissioning Program* to improve performance and to prepare to score well on an upcoming PART review were implemented, competing priorities have interfered with progress on a few recommendations. Full implementation of all recommendations is needed to achieve all intended program improvements and to avoid potential negative affects on the Program's PART score. According to NRC management, the Program expects to meet the current September 2005 milestones for these recommendations.

RECOMMENDATIONS

A Consolidated List of Recommendations appears on page 20 of this report.

OIG ANALYSIS OF AGENCY COMMENTS

At an exit conference on August 3, 2005, NRC's Executive Director for Operations agreed with OIG's recommendations and subsequently provided informal comments concerning the draft report. On September 13, 2005, the Executive Director transmitted a memorandum with formal comments on this report (see Appendix F). Appendix G contains OIG's specific responses to the comments.



[Page intentionally left blank.]

ABBREVIATIONS AND ACRONYMS

CFR Code of Federal Regulations

DOE U.S. Department of Energy

EPA U.S. Environmental Protection Agency

FTE full-time equivalency

FY fiscal year

GPRA Government Performance and Results Act

IDIP Integrated Decommissioning Improvement Plan

LTR License Termination Rule

NMED Nuclear Materials Events Database

NMSS Office of Nuclear Material Safety and Safeguards

NRC U.S. Nuclear Regulatory Commission

NRR Office of Nuclear Reactor Regulation

OCFO Office of the Chief Financial Officer

OIG Office of the Inspector General

OMB U.S. Office of Management and Budget

PART Program Assessment Rating Tool

PBPM Planning, Budgeting, and Performance Management

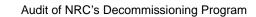
SDMP Site Decommissioning Management Plan



[Page intentionally left blank.]

TABLE OF CONTENTS

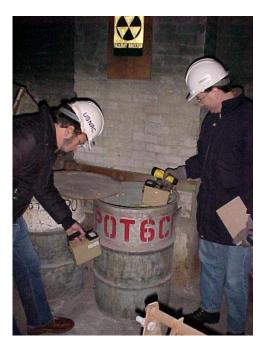
EX	ECUTI	VE SUMMARY	i		
ABBREVIATIONS AND ACRONYMSv					
I.	BACKGROUND1				
II.	PURI	POSE	5		
III.	FIND	INGS	6		
	A.	SOME PERFORMANCE RESULTS VERIFIED, UNABLE TO VERIFY OTHERS	6		
	В.	MOST PROGRAM EVALUATION RECOMMENDATIONS IMPLEMENTED, MINIMAL PROGRESS ON A FEW	12		
IV.	CON	SOLIDATED LIST OF RECOMMENDATIONS	19		
V.	AGEI	NCY COMMENTS	21		
APPENDICES					
A.	SCO	PE AND METHODOLOGY	23		
B.	PART STRUCTURE25				
C.	SAM	PLE VERIFICATION AND VALIDATION FORM	27		
D.		ELS ASSIGNED TO INDICATE STATUS OF EACH GRAM EVALUATION RECOMMENDATION	29		
E.		MARY OF STATUS OF <i>PROGRAM EVALUATION</i> OMMENDATIONS	31		
F.	AGEN	NCY FORMAL COMMENTS	33		
G.	DETA	AILED OIG ANALYSIS OF COMMENTS	39		



[Page intentionally left blank.]

I. BACKGROUND

The Nuclear Regulatory Commission (NRC) regulates the civilian commercial, industrial, academic, and medical uses of nuclear materials in order to protect the public health and safety and the environment and promote the common defense and security. The Agency's responsibility includes regulation of commercial nuclear power plants; research, test, and training reactors; nuclear fuel cycle facilities; medical, academic, and industrial uses of radioactive materials; and the transport, storage, and disposal of radioactive materials and wastes. NRC continues to regulate commercial nuclear reactors, fuel cycle facilities, and NRC material licensees after they are permanently shut down and begin decommissioning.³ Decommissioning regulations are contained in Parts of Chapter 1 of Title 10, "Energy," of the Code of Federal Regulations (CFR).



In FY 2006, NRC plans to conduct decommissioning licensing and inspection activities at 20⁴ power reactors and at approximately 40 complex materials⁵ and fuel facilities sites. The Office of Nuclear Reactor Regulation (NRR) oversees NRC-licensed research and test reactors in decommissioning and the first stages of power reactor decommissioning. The Office of Nuclear Materials Safety and Safeguards (NMSS), oversees power reactor decommissioning⁶ once certain licensing actions are completed and materials license decommissioning regulatory activities.

³ NRC defines decommissioning as removing a facility or site safely from service and reducing residual radioactivity to a level that permits (1) release of the property for unrestricted use and termination of the license; or (2) release of the property under restricted conditions and termination of the license.

NUREG 1100 Vol. 21, Performance Budget: Fiscal Year 2006

None of the vol. 21, 1 enormalise badget. Those 1 see 255

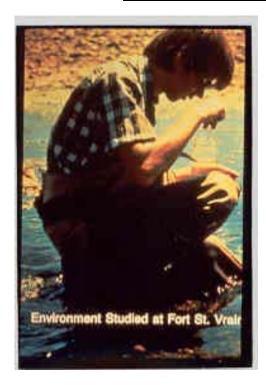
5 Complex material sites mean all sites that are categorized as Group 3 or higher in Volume 1 of NUREG-1757, "Consolidated NMSS Decommissioning Guidance."

⁶ NMSS currently oversees 13 power reactors undergoing decommissioning. Project management for oversight of the remaining power and demonstration reactors undergoing decommissioning has been retained by the Office of Nuclear Reactor Regulation.

Reactor Decommissioning

During a reactor's operating life, plant components can become radioactive. Therefore, special care is needed in the decontamination and dismantlement of the plant. During reactor decommissioning, NRC conducts inspections, processes license amendments (including approval of the License Termination Plan), and monitors the status of activities. This monitoring is intended to ensure that safety requirements are met throughout the process.

Materials Decommissioning



Each year approximately 300 materials licenses are terminated. Most are routine actions and the sites require little, if any, remediation to meet the NRC's unrestricted release criteria. The materials decommissioning program is, therefore, focused primarily on the termination of licenses that are not routine because these sites may require more complex decommissioning activities. NRC regulates the decommissioning of materials facilities by reviewing decommissioning plans, conducting inspections, and monitoring the status of activities to assure that radioactive contamination is reduced or stabilized. This monitoring system assures that safety requirements are being met throughout the process.

Budget and Resources

The total FY 2004 enacted budget authority for Decommissioning and Low-Level Waste was \$19,448,000 and 86 full-time equivalents (FTE). The FY 2005 enacted full cost for the Decommissioning and Low-Level Waste Program is \$24,081,000 and 112 FTE.7

⁷ FYs 2004 and 2005 budget authority and FTEs for Decommissioning and Low-Level Waste include resources used by organizations outside of NMSS (e.g., NRR, and the Office of Nuclear Regulatory Research).

Agreement States

Section 274 of the Atomic Energy Act of 1954, as amended, provides the statutory bases under which NRC relinquishes to the States portions of its regulatory authority to license and regulate byproduct materials, source materials, and certain quantities of special nuclear materials. The mechanism for the transfer of NRC's authority to a State is an agreement signed by the Governor of the State and the Chairman of the Commission.

Agreement States have regulatory authority to license⁸ and inspect byproduct, source or limited quantities of special nuclear material maintained within their borders at non-federal entities at non-federal sites or at federal sites not subject to exclusive federal jurisdiction. NRC evaluates Agreement State programs to ensure they are adequate to protect public health and safety and compatible with NRC's regulatory program. The map below shows which states are Agreement States.



Government Performance and Results Act

Congress passed the Government Performance and Results Act of 1993 (GPRA) to ensure that Federal agencies achieve program results. GPRA requires Federal agencies to develop 5-year strategic plans that contain a comprehensive mission statement and long-term, results-oriented goals covering each of its major functions. Additionally, GPRA requires Federal agencies to prepare an annual performance plan and an annual performance

_

⁸ Agreement State licensing activities include license termination once a licensee decommissions its site to meet the State's regulatory criteria for release.

report. The performance plan establishes performance goals for the fiscal year; briefly describes the means and strategies needed to meet the goals; and describes the means used to verify and validate performance. The performance report reviews the Agency's success in achieving its performance goals for each fiscal year.

OMB PART Guidance

The Office of Management and Budget (OMB) developed the Program Assessment Rating Tool (PART) to—

- 1. assess and improve program performance so that the Federal government can achieve better results, and
- 2. provide a sound basis for budget and management decisions.

It builds on GPRA by encouraging agencies to integrate operational decisions with strategic and performance planning.

PART is a diagnostic tool intended to systematically and consistently assess the performance of program activities across the Federal government. It is comprised of a series of questions, divided into four sections. Each section and its associated objective are summarized in Appendix B. PART section 2, *Strategic Planning*, includes an element on whether independent evaluations of sufficient scope and quality are conducted on a regular basis or as needed to support program improvements and evaluate effectiveness. Agencies work together with OMB to decide which programs will be reviewed using the PART for the coming year.

Decommissioning Program's Process for Establishing Performance Expectations and Monitoring Performance

The NMSS decommissioning program maintains a process for establishing performance expectations and monitoring performance that is aligned with GPRA requirements. Through this process, the program has established goals, quantifiable performance measures, and operation plans delineating the activities and resources required to achieve those goals. Processes are in place to periodically update the status of the operating plan and to determine whether the program is on track to achieve performance results.

In the NRC Strategic Plan FY 2000 – FY 2005, the Agency identified the decommissioning program as an area to be assessed in FY 2003. The results of that assessment are contained in the report, Program Evaluation of Changes to the Decommissioning Program (Program Evaluation), published in September of 2003.

II. PURPOSE

NRC's FY 2006 performance plan identified Decommissioning and Low-Level Waste as a program scheduled to be reviewed using PART for Budget Year 2008. Because this program will be subject to a PART review in FY 2006, agency managers requested OIG to review the decommissioning program.

The objective of the audit was to determine whether NRC's decommissioning program achieves desired performance results as stated in the Agency's *Strategic Plan* and reported in the *Performance and Accountability Report.* That is –

- 1. Verify whether the Program achieves its performance results; and
- 2. Determine whether NRC's decommissioning program staff implemented recommendations made in the *Program Evaluation of Changes to the Decommissioning Program* to improve program performance.

See Appendix A for more details on the scope limitations and methodology of this audit.

III. FINDINGS

The decommissioning program evaluates its effectiveness by using outcome, performance and output measures contained in the Agency's strategic and performance plans. Additionally, an FY 2003 self-evaluation resulted in 21 recommendations intended to improve the Program's effectiveness and efficiency. While NRC's decommissioning program has processes in place to monitor, evaluate and report on performance,--

- A. some performance results were verified, but OIG was unable to verify others; and
- B. the decommissioning program implemented most *Program Evaluation* recommendations, but has made minimal progress to implement a few others.

A. Some Performance Results Verified, Unable to Verify Others

As required by GPRA, some decommissioning program performance results were verifiable. However, OIG was unable to verify all reported results. This problem occurred because responsible staff members did not maintain adequate supporting documentation. Without adequate supporting documentation, reported performance results cannot be verified. Specifically, NRC—

- > cannot confirm that program goals are met,
- cannot be sure conclusions about the effectiveness of the program are reliable, and,
- independent evaluators would not have data needed to verify and validate the program's performance results.

GPRA Requires Performance Data to be Verifiable and Valid

Performance data must be reliable, verifiable and valid to be valuable as a basis for budget and management decisions. Specifically, GPRA requires that performance results data be verifiable and valid. Also, NRC's *Performance and Accountability Report, Fiscal Year 2001* states that, "Assessing the reliability and completeness of performance data is critical to managing for results." NRC managers use a form to attest to the reliability of the performance results data. The staff refers to these forms as "verification and validation" forms.

Performance and Output Goals and Targets

Each year NRC prepares a performance plan to establish performance goals and measures for the coming year. The annual *Performance and Accountability Report* discusses program performance and the Agency's success in achieving its strategic goals, performance goals and performance targets. NRC's *Performance and Accountability Reports* for FYs 2001, 2002, and 2004 reported that all performance measures pertaining to NRC's decommissioning program were met.

Additionally, in 2003, NMSS conducted an evaluation to assess the effectiveness of the decommissioning program and the individual programmatic changes and improvements, as well as to recommend future improvements for the program. The self-assessment team concluded that the decommissioning program has been effective at meeting NRC's strategic and performance targets.

Some Performance Results Not Verifiable

OIG was able to verify performance results for four measures, but was unable to verify results for six others. OIG verified results for four of the decommissioning program's FYs 2001 and 2002 performance measures as reported in the *FY 2003 Program Evaluation of Changes to the Decommissioning Program* and results for four of its FY 2004 measures reported in the *Performance and Accountability Report, FY 2004.* Specifically, by querying the Nuclear Material Events Database (NMED) and reviewing supporting documents, the OIG verified the following decommissioning program performance results for FYs 2001, 2002, and 2004:

- No deaths resulting from acute radiation exposure from radioactive waste;
- No events resulting in significant radiation exposure from radioactive waste;
- No events resulting in radiation overexposures from radioactive waste that exceed regulatory limits; and

0

⁹ In the *FY 2003 Program Evaluation of Changes to the Decommissioning Program*, the program staff reported that it met all FYs 2001 and 2002 performance measures. OIG attempted to verify the reported results for FYs 2001 and 2002 and also attempted to verify FY 2004 performance results to determine the current status of performance.

¹⁰ Much of the data reported in the *Performance and Accountability Report* is derived from NRC's abnormal occurrence data which is based, in part, on events reported by licensees to the NMED. Performance data for eight performance measures pertaining to the decommissioning program are derived from the NMED system.

➤ Complete at least 2 key process improvements per year in selected program and support areas that increase efficiency, effectiveness and realism.

Using the NMED system, OIG generated reports to verify that no events occurred in FYs 2001, 2002 and 2004, that met the reporting criteria for three performance measures (Numbers 1, 2 and 5 highlighted in green in Table 1). Additionally, OIG used other Agency documents to verify that the Program met the performance measure to complete at least 2 key process improvements.

However, OIG was not able to verify performance results for the remaining five performance measures derived from NMED (Numbers 3, 4, 6, 7 and 8 highlighted in yellow in Table 1) and one other performance measure to complete all public outreaches (Number 9).

TABLE 1
Summary of FYs 2001, 2002, and 2004 Performance Results Verified by OIG

Strategic Goal: Prevent significant adverse impacts from radioactive waste to the current and future health and safety of the public and the environment and promote the common defense and security.	
No deaths resulting from acute radiation exposure from radioactive waste.	Verified
2. No events resulting in significant radiation exposure from radioactive waste.	Verified
3 No release of radioactive waste causing an adverse impact on the environment.	Not Verifiable
4 No losses, thefts, diversion, or radiological sabotages of special nuclear material or radioactive waste.	Not Verifiable
Performance Goal: Maintain safety, protection of the environment, and the common defense and security.	
5. No events resulting in radiation overexposures from radioactive waste that exceed applicable regulatory limits.	Verified
6. No breakdowns of physical protection resulting in a vulnerability to radiological sabotage, theft, diversion, or loss of special nuclear materials or radioactive waste.	Not Verifiable
7. No radiological releases to the environment from operational activities that exceed the regulatory limits.	Not Verifiable
8. 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.	Not Verifiable
Performance Goal: Increase public confidence.	
9. Complete all of the public outreaches	Not Verifiable
Performance Goal: Make NRC activities and decisions more effective, efficient, and realistic.	
10. Complete at least 2 key process improvements per year in selected program and support areas that increase effectiveness, efficiency, and realism.	Verified

<u>Staff Did Not Maintain Adequate Supporting Documentation for Performance Data</u>

Although an FY 2003 NMSS assessment¹¹ of performance measures previously identified a problem with retaining some supporting documentation for FY 2002 and recommended retaining hard copies of NMED reports, inadequate documentation was available for OIG to verify all FYs 2001, 2002 and 2004 reported results pertaining to the decommissioning program. NMSS management and the staff member responsible for collecting and compiling performance results data expect individual programs 1) to maintain supporting documentation and 2) to complete verification and validation forms that attest to the reliability of the data (for an example of a verification and validation form, see Appendix C). However, some staff members involved in submitting NMSS performance data said they were not aware of any requirements to maintain supporting documentation for performance results.

Supporting Documentation Discarded

NMSS' internal assessment included the following recommendation that was made to strengthen the office's performance measure process—

Recommendation 1 - "Staff members should retain hard copies of the NMED reports used to identify the numbers of reportable performance measure events provided to OCFO [Office of the Chief Financial Officer] and keep the reports on file."

The report further stated, "While NMSS appears to be in compliance with the OMB standards [OMB Circular A-11], recommendations 1 and 2 are relevant to the issue of data completeness and reliability. Those recommendations highlight the importance of ensuring clear, consistent, and up-to-date procedures and records for data collection and reporting as a means for maintaining confidence that data is complete and reliable." However, a Division of Waste Management and Environmental Protection staff member discarded supporting documentation for FY 2004 performance results and did not have FY 2001 supporting documentation because he was not responsible for submitting data in FY 2001. Furthermore, because the supporting documentation for FY 2002 was discarded prior to

ç

¹¹ In the NMSS report, *Internal Assessment of Performance Measures*, prepared July 17, 2003, staff identified a problem with retaining performance data supporting documentation for the FY 2002 cycle. The report notes that while NMSS staff searched NMED and generated reports to identify reportable events, if any, they did not keep copies of the NMED generated reports (pp. 3 and 4 of 11).

the NMSS assessment, it was not available for OIG to use to verify performance results.

Reliance on Verification and Validation Forms

NMSS staff responsible for reporting performance results relies on verification and validation forms as supporting documentation for performance data. The staff that reports the results expects the organizations that prepare and submit the results to maintain the detailed documentation. A staff member said managers annually check a box on the verification and validation forms stating whether or not "Data can be relied on by agency managers and other decision-makers." He said the box is always checked, indicating no reluctance to rely on the data. However, these verification and validation forms provide neither source documents nor data to support the reported results.

Reported Performance Results Cannot be Verified

The verification and validation forms prepared and maintained by NMSS staff comply with OMB's reliability standard. However, the mangers' conclusions that data can be relied on, as indicated on these forms, becomes questionable if adequate support in either electronic or hard copy is not maintained.

NRC managers said they use performance measures as a basis for determining whether the decommissioning program is effective. However, without adequate supporting documentation, NRC cannot verify and validate performance data that demonstrates that all performance targets have been met. Therefore, NRC cannot be sure that the program is achieving intended results and that conclusions about the effectiveness of the program are appropriate.

Furthermore, one element of the PART requires that programs conduct independent evaluations that conclude that the program demonstrates that it is effective. Independent evaluators rely on supporting documentation as a method to evaluate and confirm the effectiveness of programs. Without supporting documentation, independent evaluators will not have the data needed to verify and validate the Program's performance results.

Summary

OIG verified performance results for four performance measures pertaining to the decommissioning program. However, because staff members did not maintain adequate supporting

OMB considers data to be reliable "... when there is neither a refusal nor a marked reluctance by agency managers or decision makers to use the data in carrying out their responsibilities."

documentation, OIG was not able to verify performance results for six other measures. Consequently, NRC cannot be sure the program is achieving intended results and that conclusions drawn about the effectiveness of the decommissioning program are reliable. Additionally, independent evaluators would not have data needed to verify and validate the program's performance results. Without independent evaluations that can verify the program's effectiveness, the program may not receive a positive score on at least one element of the PART review.

RECOMMENDATION

OIG recommends that the Executive Director for Operations:

 Clarify and disseminate expectations for generating and maintaining supporting documentation for performance data to staff responsible for preparing and collecting performance data.

B. Most *Program Evaluation* Recommendations Implemented, Minimal Progress on a Few

NMSS implemented most of the recommendations made in the *Program Evaluation of Changes to the Decommissioning Program.*The staff intended for the recommendations to improve performance and to prepare the program to score well on an upcoming PART review. However, competing priorities have led to minimal work on a few recommendations. Until all recommendations are fully implemented, some intended program improvements may not be achieved and the Program's PART score could be negatively affected.

<u>Program Evaluation of Changes to the Decommissioning</u> <u>Program</u>

In FY 2003, decommissioning staff conducted the *Program Evaluation of Changes to the Decommissioning Program*. The objectives of the evaluation were to:

- evaluate the effectiveness of NRC's Division of Waste Management's decommissioning program,
- > evaluate individual program changes/improvements; and
- recommend future improvements.

The report concluded that the decommissioning program was effective at meeting the Agency's strategic performance measures and effectively used self-assessments and program changes to improve the regulatory framework, decommissioning process, internal program management processes, and public involvement.

The report states, "Although significant improvements have been completed, future improvements would be beneficial." In particular, recommendations from the *License Termination Rule [LTR] Analysis* and the *Program Evaluation* would offer potentially significant future improvements for the Program and would improve internal program management. The study made 21 recommendations. The planned improvements resulting from the LTR analysis and the decommissioning *Program Evaluation* were

1

¹³ In June 2002, the Commission directed the staff to conduct an analysis of LTR issues. Staff experienced with the LTR had revealed some important implementation issues impacting the decommissioning of sites. The results of the LTR analysis and recommended regulatory actions were summarized in SECY-03-0069,

Results of the License Termination Rule Analysis, issued May 2003.

14 The Program Evaluation contained 8 primary recommendations. Six of the 8 primary recommendations included sub recommendations for a total of 19 sub recommendations. Two primary recommendations did not have sub recommendations. Therefore, OIG evaluated the status of the 19 sub recommendations and the two primary recommendations (see Appendix E).

consolidated into an *Integrated Decommissioning Improvement Plan, FY 2004-2007* (IDIP). The IDIP serves as a "continual improvement" plan for the decommissioning program and is used to track improvements needed for the decommissioning program's PART in FY 2006.

<u>Implementation of Most Recommendations on Track, Minimal</u> Progress on a Few

The decommissioning program has either completed or made progress towards the implementation of 17 of 21 recommendations contained in the *Program Evaluation*, but, has made minimal progress to implement three recommendations (see Chart 1 below). Work on the remaining recommendation is not scheduled to begin until FY 2006 and is therefore classified as "not applicable."

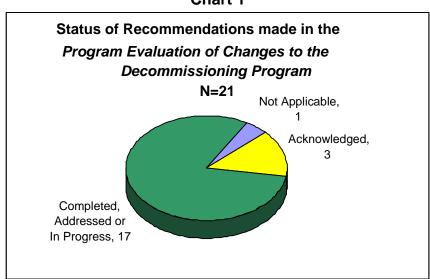


Chart 1

OIG reviewed each of the 21 recommendations to determine their status, as indicated by the following five OIG labels:

- 1. Completed
- 2. Addressed
- 3. In Progress,
- 4. Acknowledged, and
- 5. Not applicable.

For a full description of the five labels, see Appendix D. For a table that summarizes the status of the 21 recommendations, see Appendix E.

Recommendations with Minimal Progress

Three recommendations have a significant amount of work remaining to be considered completed, addressed or in progress. They are:

- Establish a baseline for decommissioning costs for specific sites and explore the feasibility of a method to measure efficiency and cost effectiveness;
- Coordinate and review information from Headquarters and Regions for existing decommissioning sites to monitor progress, consistency, and efficiency of resolving common policy and technical issues; and
- Coordinate and review information with currently operating licensed sites to identify and resolve conditions or events that could complicate future decommissioning.

Staff has been working on a mechanism to establish baseline data for decommissioning costs needed to implement recommendation 1 above. However, this mechanism is not yet in place. Therefore, the baseline data for decommissioning costs has not yet been established. The staff is working to develop a crosswalk between Technical Assignment Control codes and budget in order to monitor FTEs expended. Without this mechanism, the staff is not able to establish the baseline decommissioning costs against which future costs can be compared to measure efficiencies gained.

Procedures for expanding management reviews that were intended to address recommendations 2 and 3 above were originally scheduled to be completed in December 2004. However, these procedures have not yet been completed and the completion date was changed to September 2005. Improvement in consistency and efficiency in resolving common policy issues cannot be realized until these two recommendations are implemented.

<u>Competing Priorities Hinder Progress on Implementing Recommendations</u>

Competing priorities have hindered progress on the three recommendations. Consistent with the Agency's Planning, Budgeting, and Performance Management process, managers periodically review resource assignments and reassign them based on emergent priorities. In regard to the recommendation to establish baseline decommissioning costs, one staff member said,

the major obstacles to evaluating efficiencies is determining how to evaluate and how much to invest in evaluation since the decommissioning program is so small. Various staff interviewed said –

- getting quantitative information to measure improvements in efficiencies is difficult;
- tracking expenditures of FTEs requires additional resources;
- assigning dedicated resources for measuring efficiency did not occur because it is a collateral duty;
- measuring efficiencies gained is both an "endemic problem" and a technical problem; and
- > putting in place the technical capability to measure certain efficiencies is hindered by requests to achieve new efficiencies.

Because dedicated resources were not assigned and methodologies were not established to implement recommendation 1, (baseline decommissioning cost data), the staff have measured gains in efficiency for some program areas qualitatively rather than quantitatively.

At the time this report was prepared, an NRC manager said he hired a staff member to, among other things, work on implementing the recommendation to establish baseline decommissioning cost data. Additionally, the staff is continuing to explore approaches to measuring the efficiency of the decommissioning program. According to NRC management, the Program expects to meet the current September 2005 milestones for these three recommendations.

Some Program Improvements May Not be Achieved

Without significant progress on these three recommendations, the decommissioning program may not achieve some of the program improvements. Recommendations made in the *Program Evaluation* were intended to help achieve the following two near-term goals—

- Continue to improve the efficiency and timeliness of decommissioning activities at all sites without impacting safety or public confidence, and
- Minimize or mitigate future decommissioning problems.

Progress towards implementing the *Program Evaluation* recommendations, as summarized in Appendix E, represents a

concerted effort and commitment to improving the effectiveness of the Program. However, minimal progress on three recommendations could result in missed opportunities to improve the efficiency or effectiveness of the Program.

Additionally, in the *Program Evaluation*, staff stated that implementation of these recommendations is expected to improve the Agency's response to PART questions in the planned FY 2006 review. For instance, the recommendation to "Establish a baseline for decommissioning costs for specific sites and explore the feasibility of a method to measure efficiency and cost effectiveness" was intended to improve the Agency's readiness to receive a positive answer on the following two PART questions:

- ➤ PART question 3.4, "Does the program have procedures (e.g., competitive sourcing/cost comparisons, IT improvements, appropriate incentives) to measure and achieve efficiencies and cost effectiveness in program execution?"
- ➤ PART question 4.3, "Does the program demonstrate improved efficiencies or cost effectiveness in achieving program goals each year?"

To receive a "yes" answer on the PART question 3.4, OMB guidance focuses on whether the program has regular procedures in place to measure and achieve efficiencies and cost effectiveness. PART question 4.3, requires that the program demonstrate [emphasis added] improved efficiencies or cost effectiveness over the prior year. While plans exist to develop the mechanism to establish baseline decommissioning costs, the Program may not have time to compare the current years' decommissioning costs against the prior years' costs. Therefore, the program may not be able to demonstrate improved efficiencies and staff may be required to answer "no" to these two PART questions.

Summary

While most recommendations made in the *Program Evaluation of Changes to the Decommissioning Program* to improve performance and to prepare to score well on an upcoming PART review were implemented, competing priorities have interfered with progress on a few recommendations. Full implementation of all recommendations is needed to achieve all intended program improvements and to avoid potential negative affects on the Program's PART score. According to NRC management, the Program expects to meet the current September 2005 milestones for these three recommendations.

RECOMMENDATIONS

OIG recommends that the Executive Director for Operations:

- 2. Bring closure to the following outstanding *Program Evaluation* recommendation—
 "Establish a baseline for decommissioning costs for specific sites and explore the feasibility of a method to measure efficiency and cost effectiveness."
- 3. Bring closure to the following outstanding *Program Evaluation* recommendation—
 "Coordinate and review information from Headquarters and Regions for existing decommissioning sites to monitor progress, consistency, and efficiency of resolving common policy and technical issues."
- 4. Bring closure to the following outstanding *Program Evaluation* recommendation—
 "Coordinate and review information with currently operating licensed sites to identify and resolve conditions or events that could complicate future decommissioning."



[Page intentionally left blank.]

IV. CONSOLIDATED LIST OF RECOMMENDATIONS

OIG recommends that the Executive Director for Operations:

- 1. Clarify and disseminate expectations for generating and maintaining supporting documentation for performance data to staff responsible for preparing and collecting performance data.
- 2. Bring closure to the following outstanding *Program Evaluation* recommendation—
 "Establish a baseline for decommissioning costs for specific sites and explore the feasibility of a method to measure efficiency and cost effectiveness."
- 3. Bring closure to the following outstanding *Program Evaluation* recommendation—
 "Coordinate and review information from Headquarters and Regions for existing decommissioning sites to monitor progress, consistency, and efficiency of resolving common policy and technical issues."
- 4. Bring closure to the following outstanding *Program Evaluation* recommendation—
 "Coordinate and review information with currently operating licensed sites to identify and resolve conditions or events that could complicate future decommissioning."



[Page intentionally left blank.]

V. AGENCY COMMENTS

At an exit conference on August 3, 2005, the Executive Director for Operations agreed with OIG's recommendations and subsequently provided informal comments concerning the draft report. On September 13, 2005, the Executive Director transmitted a memorandum with formal comments on this report (see Appendix F). Appendix G contains OIG's specific responses to the comments.



[Page intentionally left blank.]

Appendix A

SCOPE AND METHODOLOGY

The objective of the audit was to –

Determine whether NRC's decommissioning program achieves desired performance and results as stated in the Agency's Strategic Plan. That is –

- 1). Determine whether the program achieves the performance results; and
- 2). Determine whether NRC's decommissioning program implemented recommendations made in the *Program Evaluation of Changes to NRC's Decommissioning Program* to improve program performance.

This audit did not review NRC's decommissioning fund program which is the subject of a separate ongoing OIG audit.

To accomplish the objective of this audit, OIG reviewed Federal legislation, regulations and guidance to determine the requirements for –

- establishing performance expectations,
- monitoring and assessing programs' performance, and
- assuring reliable performance data.

OIG reviewed and attempted to verify and validate the decommissioning program's NRC-reported performance results for FYs 2001, 2002 and 2004. OIG also analyzed the status of recommendations made in the September 29, 2003, *Program Evaluation of Changes to the Decommissioning Program.* OIG met with staff in the Office of Nuclear Material Safety and Safeguards and the Office of the Chief Financial Officer to gain an understanding of the process and controls in place for collecting and reporting on the decommissioning program's performance and applying the OMB Program Assessment Rating Tool to NRC programs.

This audit was conducted in accordance with generally accepted Government audit standards and included a review of management controls related to the objective of this audit. This audit was conducted from December 2004 to May 2005.

Major contributors to this report are Anthony Lipuma, Team Leader, Nuclear Safety Audits, Sherri Miotla, Audit Manager, Deb Lipkey, Sr. Management Analyst, and Andrew Blanco, Engineer.

Appendix B

PART STRUCTURE

PART is a diagnostic tool designed to systematically and consistently assess the performance of program activities across the Federal government. It is comprised of a series of questions, divided into four sections. Each section and its associated objective are summarized below.

- Program Purpose & Design Assess whether the program's purpose and design are clear and sound.
- Strategic Planning Assess whether the program has valid longterm and annual measures and targets.
- Program Management Rates agency management, including financial oversight and program improvement efforts.
- Program Results/Accountability Rates program performance on measures and targets reviewed in the strategic planning section and through other evaluations.



[Page intentionally left blank.]

Appendix C

SAMPLE VERIFICATION AND VALIDATION FORM

Office: Nuclear Material Safety and Safeguards		
Arena: Nuclear Waste Safety		
Performance Goal: Maintain safety, protection of the environment, and the common defense and security.		
 Performance Measure: 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. 		
SES Manager:		
	Performance	
	4. Target	5. Actual
	FY 2001: 0 FY 2000: 0 FY 1999: 0 FY 1998: 0 FY 1997: 0	FY 2001: 0 FY 2000: 0 FY 1999: 0 FY 1998: 0 FY 1997: 0
6. Report Prepared By:		
7. Check where appropriate: () Discontinued Goal () Preliminary Data (X) Actual data () Incomplete data (attach a written explanation) (X) Data can be relied on by agency managers and other decision-makers (attach a written explanation) () Steps are being taken to improve the quality of the data (attach a written explanation) () The target value is planned to be changed (attach a written explanation) () Unmet Goal (attach a written explanation) Additional comments:		



[Page intentionally left blank.]

Appendix D

LABELS ASSIGNED TO INDICATE STATUS OF EACH PROGRAM EVALUATION RECOMMENDATION

OIG reviewed each of the twenty-one recommendations to determine their status. Each recommendation was assigned one of five labels indicating the status of the recommendation. The five labels assigned were:

- 1) Completed,
- 2) Addressed,
- 3) In Progress,
- 4) Acknowledged, and
- 5) Not applicable.

1. Complete

A recommendation is assigned the label of "complete" if it has been resolved and no further work needs to be done to implement that recommendation.

2. Addressed

A recommendation is assigned the label of "addressed" if the focus of the recommendation has been resolved, but the recommendation requires repeated iterations of an action to be complete. (e.g., "Revise annual budget output measures and targets to be outcomes that are representative of expected key accomplishments for the year, including improvements.")

3. In Progress

A recommendation is assigned the label of "in progress" if work on the recommendation has begun, but that work is currently incomplete. For instance, the decommissioning has completed some, but not all, of the items cited in one recommendation that includes developing case histories and lessons learned as examples of flexibility, risk informed approaches, realistic dose modeling, and prioritization of sites/activities using risk. However, the Program is in the process of developing the others.

4. Acknowledged

A recommendation is assigned the label of "acknowledged" if implementation is scheduled for work in the future (i.e., they have a work plan), but only minimal progress made.

5. Not Applicable

A recommendation was assigned the label of "not applicable" because it did not fall under one of the other four labels and was not due to begin until FY 2006 (i.e., "Reevaluate the program and LTR in FY 2006 to support the scheduled OMB PART for the Decommissioning Program").

Appendix E

Summary of Status of *Program Evaluation* Recommendations

Recommendation	December detion	Status
Number 1	Recommendation Establish a Comprehensive Decommissioning Program	Status
·	Perspective	
1.a	Redefine the objectives and scope of the Decommissioning	Complete
	Program for all decommissioning sites and subsume the	G 0p. 101.0
	SDMP sites.	
1.b	Redefine the roles of organizations involved with the	In Progress
	Comprehensive Decommissioning Program. No longer	· ·
	require Commission approval role for removing sites from	
	the SDMP. 15	
1.c	Consider centralizing the Decommissioning Program project	Addressed
	management and review for complex materials sites.	
1.d	Define and manage all decommissioning sites using a	In Progress
	graded approach to prioritize, allocate, and track both	
	licensing and inspection activities and resources in both	
	Headquarters and all the Regions. The graded approach	
	could be based on site-specific risk insights and	
2	decommissioning challenges. Implement the new Consolidated Decommissioning	
2	Guidance tailored to staff and licensee needs. Emphasize	
	key topics such as using flexibility, risk informed	
	approaches, and realistic dose modeling.	
2.a	Develop case histories and lessons learned as examples of	In Progress
	flexibility, risk informed approaches, realistic dose modeling,	regrees
	and prioritization of sites/activities using risk.	
2.b	Train staff in DWM, Regions, other divisions on the	In Progress
	Consolidated Guidance and key topics tailored to their	
	decommissioning roles, sites, and decommissioning phase.	
	Share lessons learned and case studies for implementing	
	the guidance at specific sites, especially for issues cross	
0.0	cutting many sites.	A d due e e e d
2.c	Conduct frequent and in-depth consultations with individual licensees to implement guidance and share lessons	Addressed
	learned/case studies tailored to specific sites.	
2.d	Establish a Decommissioning Lessons Learned Page on the	In Progress
	Decommission Web site to share among all licensees site-	rog.coo
	specific lessons learned; issues, and example case studies.	
3	Improve staff availability and efficient utilization.	
3.a	Reorganize/reassign/add staff so that the Decommissioning	In Progress
	Program and specific sites have sufficient resources,	
	especially for critical disciplines (e.g., health physics, dose	
	modeling, and hydrogeology).	
3.b	Improve the resource tracking process and system to	In Progress
	allocate budgeted resources and then track actual staff	
	resource expenditures for individual sites/projects. Use the	
	new process to support management decisions to reallocate	
	resource loading to respond to emerging issues, changing licensee schedules, and approved unbudgeted work.	
3.c	Establish a baseline for decommissioning costs for specific	Acknowledged
0.0	sites and explore the feasibility of a method to measure	/ tokinowieugeu
	one and orphore are reading of a mounted to meadure	

_

¹⁵ Site Decommissioning Management Plan sites are those that have unusual or complex cleanup challenges, such as a great deal of contamination, potential or actual groundwater contamination, or contaminated, unused buildings. Removal of a site from the SDMP list signifies it successful remediation. The SDMP designation was eliminated in FY 2004 and those sites formerly designated as SDMP have been incorporated into the "complex site" designation.

	efficiency and cost effectiveness.	
4	Expand management reviews of all decommissioning sites among all NRC organizations involved with existing and future decommissioning.	
4.a	Coordinate and review information from Headquarters and Regions for existing decommissioning sites to monitor progress, consistency, and efficiency of resolving common policy and technical issues.	Acknowledged
4.b	Coordinate and review information with currently operating licensed sites to identify and resolve conditions or events that could complicate future decommissioning.	Acknowledged
5	Compare and evaluate NRC's Decommissioning Program to similar programs.	
5.a	Share decommissioning lessons learned among NRC and Agreement States.	In Progress
5.b	Consider options and feasibility for an independent review of NRC's Decommissioning Program (e.g., American Society of Mechanical Engineers, Agreement States, others).	Addressed
6	Revise annual Budget output measures and targets, to be outcomes that are representative of expected key accomplishments for the year, including improvements.	Addressed
7	Consider using incentives to facilitate licensee decommissioning, where appropriate. Evaluate options for potential incentives such as staff dose modeling for licensees or assigning special high priority for staff reviews under conditions such as bankruptcy.	In Progress
8	Document and implement a "continual improvement" plan that systematically and periodically reevaluates and adjusts the program.	
8.a	Plan and budget the recommended new <i>Program Evaluation</i> improvements using the Agency's PBPM process during the next budget cycle and determine which recommendations to implement and the appropriate schedule;	Addressed
8.b	Implement the new <i>Program Evaluation</i> improvements and Commission-directed LTR Analysis improvements during FY 2004-2005.	In Progress
8.c	Reevaluate the program and LTR in FY 2006 to support the scheduled OMB PART for the Decommissioning Program.	Not Applicable
8.d	Plan future reevaluations.	In Progress

Appendix F

AGENCY FORMAL COMMENTS



UNITED STATES NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

September 13, 2005

MEMORANDUM TO:

Stephen D. Dingbaum

uis A. Reyes

Assistant Inspector General for Audits

Office of the hspector General

FROM:

Executive Director for Operations

SUBJECT:

STAFF COMMENTS ON DRAFT REPORT: AUDIT OF U.S. NUCLEAR REGULATORY COMMISSION'S

DECOMMISSIONING PROGRAM

In accordance with your memorandum dated August 24, 2005, attached please find our comments on the draft audit report "Audit of NRC's Decommissioning Program." The objective of this Office of the Inspector General (OIG) audit was to "... determine whether NRC's decommissioning program achieves desired performance results as stated in the Agency's Strategic Plan and reported in the Performance and Accountability Report. Specifically, OIG's audit was to:

- 1. Verify whether the Program achieves its performance results; and
- Determine whether NRC's decommissioning program staff implemented recommendations made in the Program Evaluation of Changes to the Decommissioning Program to improve program performance.

Regarding these objectives, the OIG report concludes that (1) some performance results could be verified while OIG was unable to verify others; and (2) the decommissioning program implemented Program Evaluation recommendations, but has made minimal progress to implement a few others.

The attached, more detailed comments focus on OIG's conclusion that "... reported performance results [for the decommissioning program] cannot be verified." We believe that this conclusion does not effectively communicate the actual situation, and it is misleading for the report to indicate that results cannot be verified. The Nuclear Materials Event Database (NMED) can be used to verify performance results, as we discuss further in the attached comments, and was the source of the staff's information on NRC performance. During the NRC-OIG exit conference on August 3, 2005, OIG participants indicated that it could not easily verify that performance results had been met. Therefore, instead of stating that performance results cannot be verified, we suggest it would be more accurate for the report to indicate that the auditors could not easily verify performance measure results.

S. Dingbaum

-2-

With regard to the OIG conclusion that minimal progress has been made to implement a few of NMSS's Program Evaluation recommendations for the decommissioning program, we believe that this conclusion and associated discussion should be revised to acknowledge the staff's progress in implementing the recommendations of the self-assessment. While the report acknowledges that the staff plans to implement three cited Program Evaluation recommendations by September 2005, it discusses the schedule changes, prioritization process, and impacts if nothing is done. We suggest that instead, the report recognize that competing priorities necessitated staff revision of the original schedule for implementation of the recommendations, and that the staff expects to implement the recommendations by the end of fiscal year 2005.

If you have any questions about these comments, please contact Larry W. Camper, Director, Division of Waste Management and Environmental Protection, NMSS, at 301-415-7437.

Attachment: Comments on Draft OIG Report

COMMENTS ON DRAFT OIG REPORT

1. The Office of the Inspector General's (OIG's) report concludes that "Some performance results were verified, but OIG was unable to verify others." However, elsewhere in the report, OIG indicates that "... some performance results were not verifiable," and "... reported performance results cannot be verified." In particular, OIG tabulates 10 performance results, and identifies performance goals 3, 4, 6, 7, 8, and 9 as "not verifiable." OIG further states in the report that "... this problem occurred because responsible staff members did not maintain adequate supporting documentation." The report concludes that because the Office of Nuclear Material Safety and Safeguards (NMSS) staff did not maintain adequate supporting documentation to demonstrate that the verification and validation (V&V) forms were valid, performance results cannot be verified. As a whole, these statements seem to indicate that the performance results cannot be verified by anyone. In fact, the staff verified the results in accordance with the approved V&V procedure.

The NMSS staff has used the process committed to, and described, in the Performance and Accountability Report (PAR) to verify and validate meeting the performance measures. The following additional information specifically addresses each of the performance results:

Performance Measures 4 and 6 - For these two measures, which relate to the security and control of special nuclear materials, as of the fiscal year (FY) 2002 Performance and Accountability Report, the Office of Nuclear Security and Incident Response (NSIR) became responsible for reporting them. Only in FY 2001 did NMSS (specifically the Fuel Cycle Safety and Safeguards Division(FCSS)) "verify and validate" these measures. NMSS did not provide any V&V paperwork for FY 2002 and FY 2004 to the Chief Financial Officer, because that information was reported by NSIR. The OIG audit report should be revised to address the work that NSIR did to ensure that these measures were met for FYs 2002 and 2004, and that FCSS staff did for FY 2001.

Performance Measures 3 and 7 - For these measures, concerning releases to the environment, the staff used data in the Nuclear Materials Event Database (NMED) to determine if the measures were met. NMED contains records of incidents involving radioactive material licensed under U.S. Nuclear Regulatory Commission (NRC) regulations or compatible Agreement State regulations and reported to NRC by the NRC licensees and the Agreement States. Event records are maintained in the NMED for the period of January 1990 through the present. Results can be verified by using the advanced search feature. We recognize that knowledge of the decommissioning program (such as the licensees affected) is also required, and that lack of that knowledge may contribute to the conclusion that results are not "easily verified."

Performance Measure 8 - For measure 8, "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," the PAR provides the following footnote:

37. 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. Data sources and verification: The NRC monitors events and issues related to the safe handling, use, transportation, storage, and disposal of

-2-

radioactive waste and materials that are reported to the Commission in accordance with existing regulations. The NRC monitors events that might indicate a current or future inability of licensee or licensee's contractor's [sic] to perform a required function or activity in a safe manner. Any event, condition or substantiated allegation that is formally reported to the NRC is evaluated for safety impact and potential generic implications.

The NMSS staff monitors events that are reported and tracked in NMED. Each day, the NMSS regional events coordinator participates in the daily events briefing and coordinates with affected staff and divisions within NMSS as appropriate. In addition, licensee activities that have a potential safety impact are reviewed as part of the regular licensing and inspection programs. Licensing issues and inspection violations are all addressed and resolved in accordance with the existing and well-established programs. Allegations are handled in accordance with Management Directive 8.8, under a formal process that considers both the immediate safety implications and generic implications. In addition, the staff and the Commission have been formally identifying, tracking, and resolving decommissioning issues, some of which are related to safety, such as the issues contained in the License Termination Rule analysis described in the OIG audit report.

Performance Measure 9 - The OIG report indicates that the staff was unable to demonstrate that all of the "public outreaches" under this measure have been met. The staff believes that these can be independently verified using the following additional information.

In FYs 2001 and 2002, the performance measure for the waste safety arena was to "Complete all of the public outreaches as scheduled in the annual performance plan." On the V&V page for this measure, which was provided to OIG staff, the milestones in the performance plan are listed. Although there were many public outreaches in the decommissioning program, none were identified in the performance plan for those years. Only Yucca Mountain project and spent fuel outreaches were identified, and both were met in the waste arena. Thus, for the public outreach performance measure in the Performance and Accountability Reports for these two years, there were no data to verify public outreach for the decommissioning program. During these years, the staff initiated the preparation of communication plans for sites undergoing decommissioning to better address stakeholder interests in the sites in the decommissioning program. In FY 2004, the measure was revised to include these new activities that the staff had initiated.

For FY 2004, the V&V data sheets provided to the OIG audit team staff state that the public outreach measure for decommissioning is to "... implement public outreach activities described in decommissioning communication plans." The actual performance for the year is documented on the V&V form, which states that the staff "... implemented major activities described in the site-specific communication plans" The documentation on the form also includes a number of specific actions the staff took for public outreach at different sites. As noted above, the staff has developed site-specific decommissioning communications plans and, as necessary, activity-specific communications plans as tools to enhance NRC's public outreaches. These plans discuss public outreach activities, but are not meant to be used as schedules for outreach activities. The staff uses activities in the operating plan to document meeting public outreaches (e.g., holding meetings that are open

to observation by the public, noticing meetings, posting meeting summaries, and quarterly reviewing/revising/updating communications plans) based, in part, on specific circumstances occurring at the sites and specific interests of the stakeholders. In general, public outreaches are designed to provide information to stakeholders on licensee and NRC actions expected to occur soon or that have already occurred.

Considering the aforementioned descriptions of staff processes regarding the performance measures in question, the staff believes that the global "cannot be verified" statements of the report may be misleading. During the NRC-OIG exit meeting on the discussion draft report, OIG participants stated that it could not "easily" verify that the NMED database did not contain event reports for decommissioning sites, because it did not include a "Decommissioning" query. NMSS staff used the advance search feature of the NMED to search all event reports, arguably a difficult, time-consuming task, to determine if they were applicable to decommissioning program. This type of search provides the information necessary to determine if the performance measure is met. Therefore, we believe it would be more accurate for the report's conclusions to consistently state that the auditors could not easily verify performance measure results.

However, the staff agrees that it may be difficult for independent auditors to verify these measures on their own. Knowledge of the activities that are performed at sites, the reporting requirements, and the licensees that are undergoing decommissioning is needed to easily use NMED for determining compliance with the measure. We agree that verification by persons not familiar with the NRC decommissioning program would be time-consuming. Therefore, we plan to consider supplementing the information on the V&V forms to make the process more easily verifiable by outside auditors.

- 2. The OIG draft report cites the conclusions from a July 17, 2003, NMSS internal audit, "NMSS Internal Assessment of Performance Measures." The report states, "Although an FY 2003 NMSS assessment of performance measures previously identified a problem with retaining some supporting documentation and recommended retaining hard copies of performance data, inadequate documentation was available for OIG to verify all FYs 2001, 2002, and 2004 reported results pertaining to the decommissioning program." Please note that the NMSS internal assessment first concludes that "... reporting performance data is in good order and should stand up well to an OIG audit" and does state that staff did not keep copies of NMED reports and recommended that retention of these reports would "strengthen" the program. However, the NMSS assessment did not state that it was necessary to retain such reports so that adequate supporting documentation would be available. Thus, the OIG report conclusions do not accurately characterize the NMSS assessment findings and should be revised.
- The draft report states that NMSS management and the staff member responsible for collecting and compiling performance results expect individual programs to maintain supporting documentation. The report should reflect that this requirement is not contained in any NRC or NMSS Office directive that could be identified by the decommissioning staff.



[Page intentionally left blank.]

Appendix G

DETAILED ANALYSIS OF COMMENTS

At an exit conference on August 3, 2005, the Executive Director for Operations agreed with OIG's recommendations and subsequently provided informal comments concerning the draft report. On September 13, 2005, the Executive Director transmitted a memorandum with formal comments on this report (see Appendix F).

Below is OIG's analysis of the agency's formal comments.

NRC Comment 1

The agency believes that OIG's statement, performance results "cannot be verified," is misleading because—

- ➤ the staff used the process committed to, and described in, the Performance and Accountability Report (PAR), and
- the information does, in fact, exist in the NMED database or other sources.

OIG Response

While the agency follows the process described in the PAR, no audit trail exists to trace reported results. OIG attempted to trace reported performance results, but the agency was unable to provide reports that supported the performance statistics. NRC relies on verification and validation forms submitted by managers attesting to the reliability of performance results. OIG reviewed verification and validation forms completed in accordance with the cited process and determined that the forms neither provided nor referenced source documents or data to support the reported results.

The report remains unchanged.

NRC Comment 2

Comment 2 states, ". . . that the OIG report conclusions do not accurately characterize the NMSS assessment findings and should be revised." The agency notes that the report [NMSS *Internal Assessment of Performance Measures*] did not state that it was necessary to retain such [NMED] reports so that adequate supporting documentation would be available.

OIG Response

OIG disagrees with the agency's assertion. OIG did not characterize the NMSS report as stating that it was necessary to retain such reports so that adequate supporting documentation would be available. Nonetheless, OIG modified the report to reflect that the NMSS recommendation was made to "strengthen" the office's performance measure process and to reflect the following additional statement from the NMSS *Internal Assessment of Performance Measures*,

"While NMSS appears to be in compliance with the OMB standards [OMB Circular A-11], recommendations 1 and 2 are relevant to the issue of data completeness and reliability. Those recommendations highlight the importance of ensuring clear, consistent, and up-to-date procedures and records for data collection and reporting as a means for maintaining confidence that data is complete and reliable."

Report modified as described above

NRC Comment 3

Comment 3 states—

"The draft report states that NMSS management and the staff member responsible for collecting and compiling performance results expect individual programs to maintain supporting documentation. The report should reflect that this requirement is not contained in any NRC or NMSS Office directive that could be identified by the decommissioning staff."

OIG Response

The report already reflects that the staff were not aware of any requirements to maintain supporting document for performance results (p. 9) and makes a recommendation to the Executive Director for Operations to "Clarify and disseminate expectations for generating and maintaining supporting documentation for performance data to staff responsible for preparing and collecting performance data."

The report remains unchanged.

-

¹⁶ Recommendation 1 of the NMSS assessment states, "Staff members should retain hard copies of the NMED reports used to identify the numbers of reportable performance measure events provided to OCFO and keep the records on file."