OFFICE OF
THE INSPECTOR GENERAL

U.S. NUCLEAR
REGULATORY COMMISSION

Government Performance and
Results Act:
Review of the Fiscal Year 1999
Performance Report

OIG-01-A-03 February 23, 2001

AUDIT REPORT

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MEMORANDUM TO: William D. Travers
Executive Director for Operations

Jesse L. Funches
Chief Financial Officer

FROM: Stephen D. Dingbaum
Assistant Inspector General for Audits

SUBJECT: GOVERNMENT PERFORMANCE AND RESULTS ACT: REVIEW OF THE FY 1999 PERFORMANCE REPORT (OIG-01-A-03)

Attached is the Office of the Inspector General's audit report titled, *Government Performance and Results Act: Review of the Fiscal Year 1999 Performance Report*. The report incorporates comments provided by your offices during the exit conference, as appropriate. Formal agency comments have been included in their entirety as Appendix II. Appendix III explains why these comments were not incorporated in the report.

This report responds to a congressional request to review the Nuclear Regulatory Commission's FY 1999 performance report and determine the validity and reliability of the data used to report the agency's performance. The review concluded that at least 13 of 29 safety-related performance measures and results reported were either invalid or unreliable. In addition, the performance report did not adequately describe why NRC failed to meet one performance goal. This report makes three recommendations.

If you have any questions, please call me at 415-5915.

Attachment: As stated

cc: John Craig, OEDO

cc: R. McOsker, OCM/RAM
B. Torres, ACMUI
B. Garrick, ACNW
D. Powers, ACRS
J. Larkins, ACRS/ACNW
P. Bollwerk III, ASLBP
K. Cyr, OGC
J. Cordes, Acting OCAA
S. Reiter, Acting CIO
P. Rabideau, Deputy CFO
J. Dunn Lee, OIP
D. Rathbun, OCA
W. Beecher, OPA
A. Vietti-Cook, SECY
F. Miraglia, DEDR/OEDO
C. Paperiello, DEDMRS/OEDO
P. Norry, DEDM/OEDO
J. Craig, AO/OEDO
M. Springer, ADM
R. Borchardt, OE
G. Caputo, OI
P. Bird, HR
I. Little, SBCR
W. Kane, NMSS
S. Collins, NRR
A. Thadani, RES
P. Lohaus, OSP
F. Congel, IRO
H. Miller, RI
L. Reyes, RII
J. Dyer, RIII
E. Merschoff, RIV
OPA-RI
OPA-RII
OPA-RIII
OPA-RIV

EXECUTIVE SUMMARY

Purpose

This audit was conducted at the request of the Chairman of the Senate Committee on Governmental Affairs. The objectives of the audit were to determine (1) if the Nuclear Regulatory Commission's (NRC) fiscal year (FY) 1999 performance data was valid and reliable, and (2) if NRC's FY 2000 performance data will be more valid and reliable.

Background

The Government Performance and Results Act requires agencies to prepare three interrelated documents: a long-term strategic plan, an annual performance plan, and an annual performance report. In March 2000, NRC published its performance report for FY 1999 which contained the results of 29 safety-related performance measures. This audit evaluated the performance data in the FY 1999 performance report.

Results in Brief

At least 13 of 29 safety-related performance measures and results reported in the FY 1999 performance report were either invalid or unreliable. In addition, the performance report did not adequately describe why NRC failed to meet one performance goal. These problems were caused by inadequate management controls for ensuring the validity and reliability of the performance measures. Specifically, NRC lacked formal procedures or policies for addressing data collection, reporting results, and assigning staff responsibilities. While NRC is taking action to correct many of the deficiencies, some of the improvements to strengthen reliability will not be in place until after FY 2000. Consequently, the FY 2000 performance report will also have reliability problems.

Recommendations

The Office of the Inspector General recommends that the Chief Financial Officer develop the management control procedures needed to produce valid and reliable data, implement these management controls immediately in interim policy guidance, and institutionalize the controls in a Management Directive.

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PURPOSE

On May 10, 2000, Senator Fred Thompson, Chairman of the Committee on Governmental Affairs, requested that the Nuclear Regulatory Commission's (NRC) Inspector General analyze NRC's fiscal year (FY) 1999 performance report. NRC prepared the performance report to comply with the requirements of the Government Performance and Results Act (GPRA). On June 27, 2000, the Office of the Inspector General (OIG) partially responded to Senator Thompson's request (see Appendix V). In its response, OIG communicated that it would continue to review the data and provide additional information on the validity and reliability of performance report data at a later date. This report provides that additional information.

The objectives of this review were to determine (1) if NRC's FY 1999 performance data was valid and reliable, and (2) if NRC's FY 2000 performance data will be more valid and reliable. OIG also evaluated any unmet goals reported in the performance report. A detailed discussion of the scope and methodology is located in Appendix I.

BACKGROUND

Some of the major objectives of GPRA are to: (1) improve the confidence of the American people in the capability of the Federal Government; (2) initiate program performance reform by setting program goals, measuring program performance against those goals, and reporting publicly on their progress; (3) improve congressional decision-making by providing information on achieving agency objectives; and (4) improve the internal management of the Federal Government.

To accomplish these objectives, GPRA requires agencies to prepare three interrelated documents that establish the framework for measuring performance. These are a strategic plan, which is to be updated every 3 years; an annual performance plan; and an annual performance report. Office of Management and Budget (OMB) Circular A-11, Part 2, *Preparation and Submission of Strategic Plans and Annual Performance Plans*, provides implementing guidance for these GPRA documents.

GPRA requires that an agency's annual performance plan contain: (1) performance goals to define each program activity's expected performance level; (2) performance indicators to measure or assess the relevant outputs; (3) a basis for comparing program results with established goals; and (4) a description of the agency's verification and validation process. NRC issued its first performance plan in February 1998.[(1)] Since

[1] *Government Performance and Results Act: Performance Plan: Fiscal Year 1999,* NUREG-1627, Vol. 1, issued February 1998.

that time, the agency has published revised performance plans as part of its annual budget submissions[2] to Congress.

In March 2000, NRC published its performance report for FY 1999.[3] This report describes the level to which NRC's performance met the targets for its 29 safety-related performance goals in four strategic arenas as defined in its FY 2000 performance plan. The strategic arenas are listed in Table I on page 5.

NRC offices under the Executive Director for Operations (EDO)[4] have the primary responsibility for achieving NRC's safety-related performance goals. However, the Office of the Chief Financial Officer (OCFO) is responsible for coordinating and preparing NRC's strategic plan, annual performance plan, and annual performance report.

FINDINGS

Although NRC is improving and strengthening its performance reporting process, at least 13 of 29 measures and results reported in the FY 1999 performance report lacked validity or reliability. Further, the FY 1999 performance report did not adequately describe why NRC failed to meet one performance goal. These problems were caused by inadequate management controls for ensuring the validity and reliability of the performance measures. Because some of NRC's process improvements to strengthen reliability will not be in place until after FY 2000, the FY 2000 performance report will continue to have reliability problems.

FY 1999 PERFORMANCE MEASURES WERE NOT VALID OR RELIABLE

At least 13 of the 29 performance measures and results in NRC's FY 1999 performance report were not valid or reliable. Inadequate management controls for planning, coordinating, and communicating GPRA objectives and processes caused the validity and reliability problems. Without valid and reliable information, NRC cannot effectively evaluate its own performance for making program decisions and revisions. Additionally,

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2 *Budget Estimates and Performance Plan: Fiscal Year 2000,* and FY 2001, NUREG-1100, Vols. 15 and 16, dated February 1999 and 2000, respectively.

3 NRC's *Accountability and Performance Report: Fiscal Year 1999,* NUREG-1542, Vol. 5, March 2000. (For fiscal years 1997 and 1998, NRC included earlier versions of a performance report in its *Accountability Report*, NUREG-1542, Vols. 3 and 4, March 1998 and 1999, respectively. At the time, GPRA did not require agencies to prepare a performance report.)

4 Throughout this report, the following three offices, the Offices of Nuclear Reactor Regulation, Nuclear Material Safety and Safeguards, and Nuclear Regulatory Research, are referred to as the "program offices." Because these offices report to the EDO, they are not under the authority of the Chief Financial Officer.

the Congress and the public cannot assess how NRC fulfills its mandate to protect public health and safety, or whether the agency is a prudent steward of public funds.

Validation, as defined by the General Accounting Office (GAO),[5] is the assessment of whether the data is appropriate for the performance measure, performance targets [metrics] are appropriate for the stated measure, and each measure supports its strategic goal. Reliability is the quality of data, i.e., that the information is complete, accurate, consistently collected, and verifiable. Using valid and reliable data ensures that it will be of sufficient quality to document performance and support decision-making.

Validity

At least 13 of NRC's 29 FY 1999 performance measures and results were not valid as can be seen in Table I. For six measures, the agency used a 5-year average with no baseline to gauge an increase or decrease in performance. Three other measures were not valid because NRC had no reasonable method or process to gather the data from which to draw conclusions about performance. Other measures had either incomplete metrics to measure achievement, were completely missing one metric, or were misaligned with their strategic arena.

TABLE I — SUMMARY OF INVALID MEASURES

Strategic Arenas	Total Number of Performance Measures	Number of Measures Invalid
Nuclear Reactor Safety	8	2
Nuclear Materials Safety	14	6
Nuclear Waste Safety	6	4
International Nuclear Safety Support	1	1
TOTAL	**29**	**13**

Recent revisions to NRC's strategic plan corrected the validity issues identified with the FY 1999 performance measures. For example, NRC has changed the measures that used a 5-year average. Likewise, NRC eliminated the performance measures for which it could not gather reliable data. Because these revisions will be effective for the FY 2000 performance report, these validity issues will be resolved.

Reliability

5 *Performance Plans: Selected Approaches for Verification and Validation of Agency Performance Information,* GAO/GGD-99-139, July 1999.

Many of NRC's FY 1999 performance measures and results were not reliable. Reliability was undermined by (1) incomplete data, (2) inconsistent data interpretation, and (3) inadequate data collection processes. More than half of the performance measures for FY 1999 relied on events reported in NRC's annual *Report to Congress on Abnormal Occurrences*[6] as can be seen in the following table.

TABLE II — SUMMARY OF MEASURES RELYING ON ABNORMAL OCCURRENCE REPORT

Strategic Arenas	Total Number of Performance Measures	Measures from Abnormal Occurrences
Nuclear Reactor Safety	8	5
Nuclear Materials Safety	14	10
Nuclear Waste Safety	6	0
International Nuclear Safety Support	1	0
TOTAL	**29**	**15**

Abnormal occurrence data is generated from NRC and Agreement State licensees.[7] However, Agreement States do not always submit their reports as expected and there are significant reporting variations among the Agreement States. For example, some States submit their reports on a monthly basis, while others submit on a quarterly or even less frequent basis. Recently, one large State submitted its event reports from 1998. As a result, NRC has no assurance the reported data for these performance

6 *Report to Congress on Abnormal Occurrences: Fiscal Year 1999*, NUREG-0090, Vol. 22, February 2000. Section 208 of the Energy Reorganization Act of 1974 (Public Law 93-438) identifies an abnormal occurrence as an unscheduled incident or event that the NRC determines to be significant from the standpoint of public health or safety. Abnormal occurrence reporting is not intended to be used for the same purpose as the performance report, i.e., to measure NRC's performance during a specific time frame. Instead, abnormal occurrences are reported to Congress in the year they are identified by NRC, which may or may not be the same as the year in which the event occurred.

7 The Atomic Energy Act of 1954, as amended (Public Law 83-703), allows NRC to relinquish its regulatory authority to the States for specific materials. Because States enter into an agreement with the Commission, they are referred to as "Agreement States." During 1999, there were 31 Agreement States regulating approximately 15,500 materials licenses. NRC regulates approximately 5,200 materials licenses.

measures is complete, and cannot fully assess the effectiveness of the agency's program or the management of the program.[8] NRC is currently developing solutions to identify and resolve Agreement State reporting issues and does not expect to have a solution in place before March 2001.

Subjective and inconsistent event interpretation also contributed to unreliable data. For example, during FY 1999, fetal exposures that occurred during medical procedures conducted on the mother were counted as either "medical misadministrations" or "exposures." In such events, the mother received the appropriate exposure dosage, but the fetus also received a dose unintentionally.[9] For the FY 1999 abnormal occurrence report, the unintended fetal exposures were classified as exposures, rather than medical misadministrations. However, for the performance report, depending on the office interpreting the event, fetal exposures were classified inconsistently as either exposures or medical misadministrations. And preliminary performance results changed with each new interpretation. Although all fetal events, regardless of the dose received, eventually were reported consistent with the abnormal occurrence report, this lack of classifying criteria demonstrates how other event-based measures could be inconsistently interpreted.

No effective method for collecting data was in place to report NRC's performance for three measures in FY 1999. These three measures, one in each strategic arena (reactors, materials, waste), had the same or similar goal: "Environmental impacts are considered through the National Environmental Policy Act (NEPA) process before regulatory action is taken." The target for this goal was, "Zero environmental impacts identified and substantiated each year by external sources which were not identified as part of NRC's NEPA process." These measures relied solely on external parties to monitor and identify when NRC did not comply with its internal processes. However, there was no way for an external party to determine when NRC did not comply. These three measures have been eliminated and replaced with new measures in the agency's updated strategic plan.

Inadequate Management Controls Affected Validity and Reliability

Inadequate management controls both at the program office and coordinating office (OCFO) levels contributed to the validity and reliability problems with NRC's performance data. Management controls include the methods and procedures that management adopts to meet its objectives. The FY 1999 performance reporting process lacked formal procedures or policies for addressing data collection, reporting

8 The abnormal occurrence report is not similarly affected because the events it describes are not limited to a specific time frame.

9 Title 10 of the Code of Federal Regulations Part 35, *Medical Use of Byproduct Material*, defines medical misadministration as "the administration of: (1) A radiopharmaceutical dosage greater than 30 microcuries of either sodium iodine I-125 or I-131: (i) involving the wrong individual, or wrong radiopharmaceutical...." Until recently, NRC did not require reporting of unintentional fetal exposures in a medical setting. With the issuance of the revised Part 35 rule, this situation will be addressed.

results, or assigning staff responsibilities. The OCFO's initial call for FY 1999 performance results went unanswered until the Office of the Executive Director for Operations made a second call for the data. At that time, individual staff and office responsibilities were not defined. This led to confusion between offices over who was responsible for submission of the data. Although most of the performance measure results were provided by the Office of Nuclear Regulatory Research, the measures primarily reflect activities of either the Office of Nuclear Material Safety and Safeguards (NMSS) or the Office of Nuclear Reactor Regulation. During FY 2000, the agency began addressing this issue by assigning responsibility to offices and individuals for specific performance measures.

Despite improvements, inadequate management controls will have consequences for the FY 2000 reporting cycle. At a December 2000 NRC financial managers meeting (over 2 months after the reporting period closed), NRC's program offices were unclear about the specific measures for which they were to provide performance data. NRC offices generally expected to report their performance based on the measures in the FY 2000 performance plan. However, OCFO intends to use the FY 2001 performance plan as the framework for reporting FY 2000 results. This shift in reporting criteria may not allow offices adequate time to collect and verify their data.

Conclusions

At least 13 of 29 FY 1999 performance measures and results were either invalid or unreliable. Although NRC continually strives to improve its process, the agency faces a significant challenge to improve the validity and reliability of its performance data. Improved management controls in the form of better planning, communication, and coordination would enhance the integrity of NRC's performance data. Many planned improvements, however, will not be in place until after FY 2000.

Recommendations

OIG recommends that the Chief Financial Officer:

1. Develop an NRC Management Directive to provide the management controls needed to ensure that NRC produces credible GPRA documents.

2. Issue and implement formal interim policy guidance immediately to be used during the development of the Management Directive.

ONE UNMET PERFORMANCE MEASURE WAS NOT ADEQUATELY REPORTED

NRC did not adequately report on one of its unmet FY 1999 performance measures. The agency improperly used a generic explanation when a full explanation was required by OMB's implementing guidance. Without adequate information, the Congress and other interested parties cannot evaluate the impact of NRC's inability to meet this goal.

GPRA requires the performance report to explain the circumstances behind an unmet goal. The explanation is to state (1) why the goal was not met, (2) the plans and schedules for achieving the established performance goal, and (3) if the performance goal is impractical or infeasible, why that is the case and what action is recommended. According to OMB Circular A-11's guidance on unmet goals, an explanation may vary depending on the difference between the target and the reported result. If the difference is 'slight,' the agency may use a generic explanation. However, such explanation cannot be used if the agency changes the target, or takes other action to assure that future target levels will be achieved.

In the Nuclear Materials Safety strategic arena, the second goal was not met. This goal states, "No increase in the number of significant radiation exposures resulting from loss or use of source, byproduct, and special nuclear materials." The target for this goal was a combined 5-year average of exposure events not to exceed 2 per year. The agency reported an average of 2.2.[10] Using a generic explanation, NRC's FY 1999 performance report stated, "The performance goal established an approximate metric, and the deviation from that level is slight. There was no effect on overall program or activity performance."

NRC's use of the generic explanation was inappropriate because NMSS concluded in internal documents that the target needed reevaluation and was, in fact, revising the target. Using a generic explanation in this instance was inconsistent with the OMB guidance. The lack of adequate management controls, in particular, inadequate reporting policies and procedures, caused this reporting deficiency.

Conclusion

Performance results are intended to provide NRC, the Congress, and the public with a report card on the agency's performance. When sufficient information is missing, no party can assess the significance of an unmet goal and determine whether or what corrective action is needed. As with validity and reliability, OCFO and the other offices must work together to ensure that all parties to the GPRA process receive adequate NRC performance information.

Recommendation

OIG recommends that the Chief Financial Officer:

3. Include guidance on reporting unmet goals in both the Management Directive and the interim policy guidance on implementing GPRA initiatives.

[10] This measure was also discussed earlier on page 7 of this report.

CONSOLIDATED LIST OF RECOMMENDATIONS

OIG recommends that the Chief Financial Officer:

1. Develop an NRC Management Directive to provide the management controls needed to ensure that NRC produces credible GPRA documents.

2. Issue and implement formal interim policy guidance immediately to be used during the development of the Management Directive.

3. Include guidance on reporting unmet goals in both the Management Directive and the interim policy guidance on implementing GPRA initiatives.

OIG COMMENTS ON AGENCY RESPONSE

At the exit conference on January 12, 2001, the agency agreed with our recommendations and agreed to take corrective action. Following the conference, on February 13, 2001, the agency also provided formal comments (see Appendix II) addressing specific statements in the draft report. We considered these comments and determined that the information presented in the report was reasonable and accurate. Therefore, we have not changed the report.

OIG's analysis to each agency comment has been provided in Appendix III.

SCOPE AND METHODOLOGY

The objectives of this audit were to determine if the U.S. Nuclear Regulatory Commission's (NRC) fiscal year (FY) 1999 performance data is valid and reliable, and if NRC's FY 2000 performance data will be more valid and reliable.

To accomplish these objectives, the Office of the Inspector General (OIG) (1) reviewed the Government Performance and Results Act of 1993, related guidance issued by the Office of Management and Budget and relevant Government Accounting Office reports, and internal NRC documents; (2) analyzed and evaluated data supporting the agency's FY 1999 performance report; (3) interviewed officials and staff from the Offices of the Chief Financial Officer, Nuclear Reactor Regulation, Nuclear Material Safety and Safeguards, Nuclear Regulatory Research, State and Tribal Programs, and International Programs; and (4) analyzed all 29 of the FY 1999 performance measures for validity and selected Nuclear Materials Safety measures from the abnormal occurrence reporting process for reliability. The abnormal occurrence reporting process was reviewed for its ability to produce reliable performance measure data and not to determine the reliability of the abnormal occurrence report itself.

OIG performed this audit in accordance with generally accepted government audit standards and included a review of management controls related to the objectives of this audit. The audit was conducted from June through October 2000.

The major contributors to this report were Anthony Lipuma, Team Leader; Camilla Barror, Senior Auditor; and Debra Lipkey, Management Analyst.

AGENCY RESPONSE TO DRAFT REPORT

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

February 13, 2001

MEMORANDUM TO: Stephen D. Dingbaum
Assistant Inspector General for Audits

FROM: Jesse L. Funches
Chief Financial Officer

William D. Travers
Executive Director for Operations

SUBJECT: DRAFT REPORT - REVIEW OF THE FY 1999 PERFORMANCE REPORT (OIG-01-A-03)

Attached are NRC's comments on the *Draft Report - Review of the FY 1999 Performance Report (OIG-01-A-03)*. We appreciate your consideration of our concerns. If you have any questions, please contact Rick Rough at 415-7540.

Attachment: As stated

The Nuclear Regulatory Commission has concerns with several statements which appear in the Inspector General's draft *Government Performance and Results Act: Review of the Fiscal Year 1999 Performance Report* (OIG-01-A-03). These concerns are presented below:

1. On page 6 the report states that "... Congress and the public cannot assess how NRC fulfills its mandate to protect public health and safety, or whether the agency is a prudent steward of public funds."

Response: The NRC believes that this sentence is an overstatement. The NRC also believes that Congress has several means available to assess how NRC fulfills its mandate to protect public health and safety, and whether the agency is a prudent steward of public funds. The NRC conducts most of its business in a public forum, presents testimony to Congress as required, and publishes a wide variety of material that can be used to assess the degree to which the Agency fulfills its mandate to protect public health and safety and whether the agency is a prudent steward of public funds. The 1999 Performance Report showed the progress the NRC had made at the time the report was published developing and implementing a performance-based management system. Whatever inadequacies there may be in collecting data for the FY 1999 Accountability and Performance Report, the NRC's fundamental programs remain in place and continue to ensure the safe use of byproduct, source and special nuclear materials. We suggest that this statement be removed from the report.

2. On page 9 and 10 the report discusses problems that it claims result from using abnormal occurrence data. The report listed the unreliable measures in a table (Table 2: Unreliable Measures) which accompanies the draft report. The report implies that all measures which rely on abnormal reporting data may be unreliable, in part as a result of their reliance on Agreement State data.

Response: Not all abnormal occurrence data rely on data supplied by the Agreement States. Only 5 of the 15 measures identified in Table 2 rely on Agreement State data. For example, the first 5 measures rely on data collected by the NRC's Office of Nuclear Reactor Regulation (NRR), not Agreement States. Only the following measures rely on data supplied by the Agreement States: (1) No. 7 "Zero radiation-related deaths resulting from civilian use of source, byproduct, and special nuclear materials," (2) No.8 "No increase in the number of significant radiation exposures resulting from loss or use of source, byproduct, and special nuclear materials," (3) No. 9 "No increase in the number of losses of licensed material as reported to Congress annually," (4) No. 11 "No increases in the number of misadministration events which cause significant radiation exposures," and (5) No. 13 "No significant accidental releases of radioactive material from the storage or transportation of nuclear material or nuclear waste". We suggest that the number of measures which are considered to be potentially unreliable be reduced to 5.

Attachment

3. On page 11 the report states "Although most of the performance measure results were provided by the Office of Nuclear Regulatory Research, the measures primarily

reflect activities of either the Office of Nuclear Material Safety and Safeguards (NMSS) or the Office of Nuclear Reactor Regulation."

Response: We suggest that the statement in the draft report be replaced with the following statement. "Although most of the measures primarily reflect activities of either the NMSS or the NRR, the Office of Nuclear Regulatory Research reported results duplicating many provided by NMSS."

4. On page 12 the report states that "NRC offices generally expected to report their performance based on the measures in the FY 2000 performance plan. However, OCFO intends to use the FY 2001 performance plan as a framework for reporting FY 2000 results. This shift in reporting criteria may not allow offices adequate time to collect and verify data."

Response: The statement makes it appear that as a result of a last minute shift in the performance measures, the program offices would not be prepared to report performance data for the FY 2000 Accountability and Performance Report. The safety performance indicators reported within the FY 2000 Accountability and Performance Report are based on the NRC's FY 2000-2005 Strategic Plan that set the framework for the development of the performance indicators. The safety strategic goal measures were originally established in the NRC's FY 2000 Budget Estimates and Performance Plan, published in February 1999, and were subsequently modified in the FY 2001 Budget Estimates and Performance Plan. The offices themselves played an important part in developing the modified FY 2000 measures. The data collected by the offices was applicable to both the FY 2000 or the FY 2001 performance measures. Thus, the ability to collect and verify data was not impacted. We are not aware of any offices which have had difficulty collecting and verifying their data for the FY 2000 Accountability and Performance Report. We suggest these statements be removed from the report.

Attachment

OIG ANALYSIS OF AGENCY COMMENTS

The Office of the Inspector General (OIG) has analyzed each of the Nuclear Regulatory Commission's (NRC) four comments provided in responding to the draft report (see Appendix II) as follows:

Agency Comment No. 1:

On page 6 [page 5 in the final report] the report states that "... Congress and the public cannot assess how NRC fulfills its mandate to protect public health and safety, or whether the agency is a prudent steward of public funds."

Response: The NRC believes that this sentence is an overstatement. The NRC also believes that Congress has several means available to assess how NRC fulfills its mandate to protect public health and safety, and whether the agency is a prudent steward of public funds. The NRC conducts most of its business in a public forum, presents testimony to Congress as required, and publishes a wide variety of material that can be used to assess the degree to which the agency fulfills its mandate to protect public health and safety and whether the agency is a prudent steward of public funds. The 1999 Performance Report showed the progress the NRC had made at the time the report was published developing and implementing a performance-based management system. Whatever inadequacies there may be in collecting data for the FY 1999 Accountability and Performance Report, the NRC's fundamental programs remain in place and continue to ensure the safe use of byproduct, source and special nuclear materials. We suggest that this statement be removed from the report.

OIG Response to Comment No. 1:

The issues we noted regarding the validity and reliability of NRC's performance information are directly related to the Government Performance and Results Act (GPRA) objectives. One of these objectives is to "improve congressional decision-making by providing more objective information on achieving statutory objectives, and on the relative effectiveness and efficiency of Federal programs and spending." Our report reflects NRC's challenge (under the auspices of GPRA) to provide this objective information. The report remains as stated in the draft.

Agency Comment No. 2:

On page 9 and 10 [pages 6 and 7 in the final report] the report discusses problems that it claims result from using abnormal occurrence data. The report listed the unreliable measures in a table (Table 2: Unreliable Measures) which accompanies the draft report. The report implies that all measures which rely on abnormal reporting data may be unreliable, in part as a result of their reliance on Agreement State data.
Response: Not all abnormal occurrence data rely on data supplied by the Agreement States. Only 5 of the 15 measures identified in Table 2 rely on Agreement State data. For example, the first 5 measures rely on data collected by the NRC's Office of Nuclear

Reactor Regulation (NRR), not Agreement States. Only the following measures rely on data supplied by the Agreement States: (1) No. 7 "Zero radiation-related deaths resulting from civilian use of source, byproduct, and special nuclear materials," (2) No. 8 "No increase in the number of significant radiation exposures resulting from loss or use of source, byproduct, and special nuclear materials," (3) No. 9 "No increase in the number of losses of licensed material as reported to Congress annually," (4) No. 11 "No increases in the number of misadministration events which cause significant radiation exposures," and (5) No. 13 "No significant accidental releases of radioactive material from the storage or transportation of nuclear material or nuclear waste". We suggest that the number of measures which are considered to be potentially unreliable be reduced to 5.

OIG Response to Comment No. 2:

Table II in the draft report (page 6 of the final report) shows 15 measures derived from the abnormal occurrence reporting process. The report does not specify the number of Agreement State reporting measures. Instead, the draft report states that data supplied by Agreement States affects some performance measures. The finding remains as stated in the draft.

Agency Comment No. 3:

On page 11 [page 8 in the final report] the report states "Although most of the performance measure results were provided by the Office of Nuclear Regulatory Research, the measures primarily reflect activities of either the Office of Nuclear Material Safety and Safeguards (NMSS) or the Office of Nuclear Reactor Regulation."

Response: We suggest that the statement in the draft report be replaced with the following statement. "Although most of the measures primarily reflect activities of either the NMSS or the NRR, the Office of Nuclear Regulatory Research reported results duplicating many provided by NMSS."

OIG Response to Comment No. 3:

Our audit work supports that the sentence is correct as stated. Most of the data used to report the performance measure results originated from the Office of Nuclear Regulatory Research (RES). In fact, for one measure, the Office of Nuclear Material Safety and Safeguards provided data that conflicted with RES, and the final numbers used in the performance report where based on those numbers provided by RES. The sentence remains as stated in the draft.

Agency Comment No. 4:

On page 12 [page 8 in the final report] the report states that "NRC offices generally expected to report their performance based on the measures in the FY 2000 performance plan. However, OCFO intends to use the FY 2001 performance plan as a framework for reporting FY 2000 results. This shift in reporting criteria may not allow offices adequate time to collect and verify data."

Response: The statement makes it appear that as a result of a last minute shift in the performance measures, the program offices would not be prepared to report performance data for the FY 2000 Accountability and Performance Report. The safety performance indicators reported within the FY 2000 Accountability and Performance Report are based on the NRC's FY 2000-2005 Strategic Plan that set the framework for the development of the performance indicators. The safety strategic goal measures were originally established in the NRC's FY 2000 Budget Estimates and Performance Plan, published in February 1999, and were subsequently modified in the FY 2001 Budget Estimates and Performance Plan. The offices themselves played an important part in developing the modified FY 2000 measures. The data collected by the offices was applicable to both the FY 2000 or the FY 2001 performance measures. Thus, the ability to collect and verify data was not impacted. We are not aware of any offices which have had difficulty collecting and verifying their data for the FY 2000 Accountability and Performance Report. We suggest these statements be removed from the report.

OIG Response to Comment No. 4:

At NRC's December 2000 financial managers meeting, there was confusion about which measures would be used for reporting. During that meeting, OCFO staff provided conflicting information about which performance measures would be the basis for reporting the FY 2000 performance results. In addition, internal documents and interviews with agency staff indicated that some offices were not prepared to report on the revised measures issued in the FY 2001 performance plan. The sentence remains as stated in the draft.

LETTER FROM SENATOR THOMPSON

FRED THOMPSON, TENNESSEE, CHAIRMAN

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United States Senate
COMMITTEE ON
GOVERNMENTAL AFFAIRS
WASHINGTON, DC 20510-6250

May 10, 2000

The Honorable Hubert T. Bell
Inspector General
U.S. Nuclear Regulatory Commission
Mail Stop MS-T5-D28
Washington, D.C. 20555

Dear: Mr. Bell:

As you know, the Government Performance and Results Act (GPRA) requires agencies to submit annual performance reports in March of each year. The performance report should address the agency's accomplishments under its GPRA performance plans for fiscal year (FY) 1999. This completes the first full cycle of GPRA implementation. Thus, we have arrived at a critical juncture in our efforts to adopt an effective results orientation for the federal government.

Agency performance reports will need careful scrutiny. Therefore, I request that your office conduct a review and analysis of your agency's FY 1999 performance report. I suggest that you consider both what the agency performance report contains about the agency's performance and what it should contain. In particular, does the report tell us now, and how can future reports tell us better, what your agency is doing to achieve real results that matter to the American people?

In 1998, Congress asked Inspectors General to examine agency efforts to develop and use performance measures for progress toward achieving key performance goals and significant program outcomes, and to verify and validate selected data sources and information collection and accounting systems that support agency plans and performance reports. The Inspectors General were also asked to identify key management challenges in each of their agencies.

Using these management challenges as a framework, as well as any additional subjects or criteria that you wish to include, please analyze the agency's FY 1999 performance report in terms of the following questions:

1. What performance goals and measures from the agency's FY 1999 performance plan relate directly to each of the management challenges?

2. According to the performance report, how did the agency perform under each of the

relevant goals and measures?

3. How valid and reliable is the data by which the agency judged its performance? Where data shortcomings exist, did the agency acknowledge them and indicate what steps it will take to correct them?

4. Where an agency has not met a performance goal, does the report adequately explain why and describe a strategy to meet the goal in the future?

5. Where a goal from the FY 1999 performance plan is not covered in the performance report or has changed, did the agency adequately explain why?

6. What improvements has the agency made in its performance plan for FY 2001 that are relevant to the above issues?

I have asked GAO to analyze your agency's FY 1999 performance report. I have also asked the CRS to analyze the performance report. I encourage your office, the GAO, and the CRS to coordinate your work on the performance reports. Finally, I welcome any analysis or observations you care to make concerning your agency's performance report on issues other than those mentioned above.

Thank you for your attention to this request. If you have any questions, please do not hesitate to contact Robert Shea, of the Committee staff.

Sincerely,

Fred Thompson
Chairman

FT/rjs

OIG RESPONSE TO SENATOR THOMPSON'S LETTER

June 27, 2000

The Honorable Fred Thompson, Chairman
Committee on Governmental Affairs
United States Senate
Washington, D.C. 20510-6250

Dear Mr. Chairman:

Enclosed is our response to your May 10, 2000, letter requesting information on the Nuclear Regulatory Commission's annual performance report for FY 1999. Currently, we are conducting a detailed review of the agency's performance measures to assess the reliability of the data used in its report. This review will address part of your request. Once the review is completed, we will share the results with you.

If you have any questions about either our enclosure or about our current review, please call me at (301) 415-5930, or call Stephen Dingbaum, Assistant Inspector General for Audits, at (301) 415-5915.

Sincerely,

Hubert T. Bell **\RA**
Inspector General

Enclosure: As stated

cc: Chairman Meserve
Commissioner Dicus
Commissioner Diaz
Commissioner McGaffigan
Commissioner Merrifield
W. D. Travers, EDO
J. L. Funches, CFO
S. Reiter, Acting CIO

The following are the answers to questions from the May 10, 2000, letter to NRC's Inspector General.

1. What performance goals and measures from the agency's FY 1999 performance plan relate directly to each of the management challenges?

When we identified the management challenges for the Nuclear Regulatory Commission (NRC), they were identified for purposes outside of the Government Performance and Results Act framework. Therefore, we did not expect that these management challenges would correlate exactly with the agency's strategic plan, performance plan, or performance report. Second, the Office of Management and Budget Circular A-11 does not address relating performance goals and measures with management challenges.

NRC, however, addressed some management challenges in its performance plan. Below, I am sharing observations on how the agency addressed the management challenges in its performance plan and how NRC has proposed to address them in the strategic plan currently being developed.

Performance Plan and Performance Report
In the agency's performance plan,[1] there were no goals or measures that related directly to the management challenges. The agency did not explicitly address the management challenges in either its performance plan, or its performance report.[2]

Several management challenges were indirectly addressed in the performance plan as "strategies." At the end of each strategic arena[3] section of the performance plan, the agency listed strategies the NRC intends to utilize to ensure that the agency achieves each of its strategic goals. In addition, some management challenges were included as output measures. Attachment I contains a list of how the agency addressed each management challenge in its performance plan.

Draft FY 2000 - FY 2005 Strategic Plan
We would like to note that although neither the performance plan nor the performance report explicitly addressed the management challenges, the revised draft *FY 2000 - FY 2005 Strategic Plan*[4] contains a small proposed section devoted to the management challenges. This section notes that "Various sections of this [strategic] plan substantially

1 *Budget Estimates and Performance Plan: Fiscal Year 2000*, Feb. 1999, NUREG 1100, Vol. 15.

2 *Accountability and Performance Report: Fiscal Year 2000*, March 2000, NUREG 1542, Vol 5.

3 NRC's four strategic arenas are: (1) Nuclear Reactor Safety, (2) Nuclear Materials Safety, (3) Nuclear Waste Safety, and (4) International Nuclear Safety Support.

4 The final *FY 2000 - FY 2005 Strategic Plan* is planned to be issued by September 30, 2000.

cover the management challenges identified by the OIG and provide the actions underway or planned that would address them."

2. According to the performance report, how did the agency perform under each of the relevant goals and measures?

In an introductory section of the *Accountability and Performance Report* publication (NUREG 1542, Vol 5), the agency concluded that it achieved its performance goals for the 29 goals and measures that were reported. There was no discussion that two of the 29 performance goals were not achieved.

During our detailed review on the reliability of the performance data, we will evaluate how the agency performed under the relevant goals and measures.

3. How valid and reliable is the data by which the agency judged its performance? Where data shortcomings exist, did the agency acknowledge them and indicate what steps it will take to correct them?

At this time, we are conducting a detailed review focusing on the validity and reliability of the information reported. We expect to have the field work completed by early September and will share our results with you when we issue our report.

4. Where an agency has not met a performance goal, does the report adequately explain why and describe a strategy to meet the goal in the future?
The NRC reported the results of 29 performance measures, the combined total for its four strategic arenas. During FY 1999, it was not able to meet the following two performance goals:

In the *Nuclear Materials Safety Performance*[(5)] strategic arena, the second goal:

> "No increase in the number of significant radiation exposures resulting from loss or use of source, byproduct, and special nuclear materials."

In the *International Safety Support Performance*[(6)] strategic arena, the first outcome:

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5 See table 2, page 10, *Accountability and Performance Report: FY 1999,* NUREG 1542, Vol. 5.

6 See table 4, page 13, *Accountability and Performance Report: FY 1999,* NUREG 1542, Vol. 5.

> "Negotiated/reviewed 4 out of 5 estimated bilateral exchange agreements between the NRC and appropriate foreign counterparts."

Although both of the above results were recognized as not being achieved, there was no discussion explaining why they were not met, or how the agency intends to meet each goal in the future. The only acknowledgment for each one was a footnote stating the following:

> "The performance goal established an approximate metric, and the deviation from that level is slight. There was no effect on overall program or activity performance."

During our detailed review on the reliability of the performance data, we will consider those measures not achieved and whether they were reported adequately.

5. Where a goal from the FY 1999 performance plan is not covered in the performance report or has changed, did the agency adequately explain why?

The original FY 1999 performance plan, issued in 1998 as *Government Performance and Results Act: Performance Plan: Fiscal Year 1999* (NUREG 1627, Vol 1), was revised several times as the strategic framework evolved. In February 1999, the agency published a revision of its performance plan, as the "FY 2000 Performance Plan" in its FY 2000 "Green book," *Budget Estimates and Performance Plan: Fiscal Year 2000* (NUREG 1100, Vol 15). This version, used as the framework for the FY 1999 performance report, contains fewer strategic arenas than the original performance plan. In addition, some of the performance goals from strategic arenas that were eliminated with the revision were moved into the remaining strategic arenas, while others were eliminated from the plan all together.

Although the Green book does not indicate that the FY 2000 performance plan became the basis of the FY 1999 performance report, it does provide an explanation of changes that were made to the plan and justification for making these changes. The FY 1999 *Accountability and Performance Report* identifies the performance plan from the FY 2000 Green book as the basis for the reported goals.

6. What improvements has the agency made in its performance plan for FY 2001 that are relevant to the above issues?

The agency has made significant efforts in modifying (revising) its performance framework to strengthen the usefulness and meaningfulness of its performance measures. The draft strategic plan uses the same performance framework that was published in the FY 2001 performance plan,[7] where each of the four strategic arenas has one set of "strategic [performance] goals" with several sets of overarching "performance goals." We have been informed that the results for measures of both the strategic goals and performance goals will be reported in the FY 2000 performance report and FY 2001 performance report.

Additional topics the letter suggested for consideration:

- **I suggest that you consider both what the agency performance report contains about the agency's performance and what it <u>should</u> contain. In particular, does the report tell us now, and how can future reports tell us better, what your agency is doing to achieve real results that matter to the American people?**

  At this point in our review, it is too early for us to make any suggestions. If we identify any issues that future performance reports should include, we will include them in our report on the reliability of the data.

- **Finally, I welcome any analysis or observations you care to make concerning your agency's performance report.**

  We would like to share the following observation on NRC's FY 1999 performance report. For two strategic arenas (*Nuclear Reactor Safety* and *Nuclear Materials Safety*), most of the performance measures were derived from the same data that is used for reporting abnormal occurrences[8]. The abnormal occurrence report, issued annually to Congress, provides a detailed description of reportable events that occurred during the year. Each occurrence includes a detailed description of the event, the cause or causes, and actions that were taken to prevent reoccurrence.

  Because the performance data comes from the same source that is used to report abnormal occurrences, during our review, we will consider the data relationships between the two reports.

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7 *Budget Estimates and Performance Plan: Fiscal Year 2001,* Feb. 2000, NUREG 1100, Vol. 16.

8 *Report to Congress on Abnormal Occurrences,* Feb 2000, NUREG 0090, Vol 22.

Attachment I

The following lists ten management challenges we identified for FY 1999. For each management challenge, we have noted how the agency indirectly addressed it in its performance plan[9]:

(1) Developing and implementing a risk-informed, performance-based approach to regulatory oversight.

In the Performance Plan, NRC included some strategies for improving its regulatory framework to develop and use risk-informed, performance-based approach in regulating. These strategies were listed in the following three strategic arenas: *Nuclear Reactor Safety*, *Nuclear Materials Safety,* and *Nuclear Waste Safety*.

(2) Developing information management systems and being able to anticipate and measure the benefits to be gained.

In the Performance Plan, this management challenge was addressed in two information technology (IT) projects (Reactor Program System and STARFIRE) under the Justification for Program Request section. For these projects, demonstrating benefits was included as output measures. No other IT projects contained these, or similar, measures in the plan.

(3) Responding to the impact of industry deregulation and license transfers.

In the Performance Plan, this was not addressed. But one strategy listed in *Nuclear Reactor Safety* strategic arena did address placing a high priority on license transfers.

(4) Administering and overseeing agency procurement under government contracting rules. Government contracting rules allow the opportunity for fraud to occur.

In the Performance Plan, this was not directly addressed. But a description of how the agency manages its contracting process, "Acquisition of Goods and Services," is included in the *Management and Support* section of the plan.

(5) Effectively communicating with the public and industry.

In the Performance Plan, communication with NRC's stakeholders is included as one of the management goals listed in the *Management and Support* section of the plan. In addition, external communication was included as part of the strategies to support the following two strategic arenas: *Nuclear Reactor Safety* and *Nuclear Materials Safety*.

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9 *Budget Estimates and Performance Plan: Fiscal Year 2000*, Feb. 1999, NUREG 1100, Vol. 15. Although this performance plan was published as the "FY 2000 Performance Plan," we used this version because it was the one used as the basis for the FY 1999 Performance Report.

(6) Maintaining an unqualified financial statement opinion in light of new and existing CFO requirements.

In the Performance Plan, the financial statement opinion was indirectly addressed in the performance plan as an output measure, "Timeliness and quality of NRC's Annual Financial Statement." This measure was included in the *Management and Support* section of the plan, under Financial Management.

(7) Ensuring that NRC's processes, such as spent fuel cask certification and license renewal, are responsive to industry needs.

In the Performance Plan, ensuring NRC's processes are responsive to industry needs is not included. But the plan does address both of the examples used in this challenge. First, spent fuel cask certification is discussed in a section of the *Nuclear Materials Safety* strategic arena and includes output measures for design review completion.

Second, license renewal is included as one of the strategies in the *Nuclear Reactor Safety* strategic arena: "The NRC will place a high priority on the review of applications for renewal..."

(8) Ensuring that NRC's enforcement program has an appropriate safety focus and reflects improved licensee performance.

In the Performance Plan, the reactor enforcement program is described in the *Nuclear Reactor Safety* strategic arena. The program describes using risk information in evaluating the enforcement action to be taken. A similar discussion of the enforcement program is included in the *Nuclear Materials Safety* strategic arena.

(9) Refocusing NRC's research program to reflect a mature industry.

In the Performance Plan, the focus of NRC's research program is not addressed, although there are two lengthy research program descriptions contained in the plan under the two strategic arenas, *Nuclear Reactor Safety* and *Nuclear Materials Safety.*

(10) Responding to external influences for changing NRC's operations. For example, the ability to meet NRC's mission and requirements of the Government Performance and Results Act, as the result of a proposed agency reorganization poses a significant challenge to NRC.

In the Performance Plan, this challenge is not explicitly addressed. We note that several of our management challenges also include "responding to external influences" (see numbers 3, 4, 5, 7 and 9).

ABBREVIATIONS AND ACRONYMS

EDO	Executive Director for Operations
FY	fiscal year
GAO	General Accounting Office
GPRA	Government Performance and Results Act of 1993
NEPA	National Environmental Policy Act
NMSS	Office of Nuclear Material Safety and Safeguards
NRC	Nuclear Regulatory Commission
OCFO	Office of the Chief Financial Officer
OIG	Office of the Inspector General
OMB	Office of Management and Budget