OFFICE OF
THE INSPECTOR GENERAL

U.S. NUCLEAR
REGULATORY COMMISSION

NRC's Oversight of Research and Test Reactors

OIG-03-A-16 June 5, 2003

AUDIT REPORT

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June 5, 2003

MEMORANDUM TO: William D. Travers
Executive Director for Operations

FROM: Stephen D. Dingbaum**/RA/**
Assistant Inspector General for Audits

SUBJECT: AUDIT OF NRC'S OVERSIGHT OF RESEARCH AND TEST REACTORS (OIG-03-A-16)

Attached is the Office of the Inspector General's audit report titled, *NRC's Oversight of Research and Test Reactors*.

At the time of this audit, staff met goals for reviewing and approving licensee requests for changes to their licenses and licensee demand to license reactor operators. In addition, inspection requirements were generally satisfied. However, aspects of NRC's oversight can be improved. Specifically, management should:

- Improve guidance for inspection follow-up items,
- Improve the operating plan,
- Increase the information available to the public, and
- Document refresher and continuing inspector training.

Enhancements in these areas will result in more efficient and effective oversight.

At an exit conference on May 21, 2003, NRC officials generally agreed with the report's findings and recommendations. Comments provided at the exit conference have been incorporated, as appropriate, in our final report.

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

Attachment: As stated

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EXECUTIVE SUMMARY

BACKGROUND

Research and test reactors (also called non-power reactors) are nuclear reactors whose primary function is the safe conduct of research and development activities. Almost every field of science makes use of these reactors, which are also used to educate students for careers in the nuclear power industry, national defense, and research. The U.S. Nuclear Regulatory Commission (NRC) currently licenses 50 research and test reactors. Thirty-five of those are operating in 23 states. Fifteen others are no longer operating and are being decommissioned.

In contrast to commercial nuclear power facilities, most non-power reactors are located in urban areas, with the majority located on university campuses. The facilities typically range in power output from 0.10 watts to 20 megawatts (thermal) and most produce less than 1/1000th the power of a commercial power reactor. Unlike commercial power plants, facility staff regularly work in the reactor room or building during operation.

Radiation produced by the reactor is used in a variety of research activities at non-power reactor facilities. For example, non-power reactors are routinely used to precisely measure the presence of trace elements like environmental pollutants in soil, water, air and foods. They are also used in the production of radiopharmaceuticals and the development of treatments for shrinking cancerous tumors.

Research and test reactors are initially licensed under a two-step process which requires that NRC approve both a construction permit and an operating license. Operators at these facilities are tested by NRC to ensure that they have the required knowledge and skills to safely control the reactor and the ability to handle accidents. Additionally, NRC inspects each facility periodically to ensure that programs are conducted according to requirements.

Because most research and test reactors are located at nonprofit educational institutions which are granted fee exemptions, in FY 2002 only four research reactor facilities were subject to fees. Approximately $285,600 of budgeted costs were recovered through annual fees, resulting in $71,400 in fees to each of the four facilities.

Most research and test reactor activities are conducted by the Office of Nuclear Reactor Regulation, Research and Test Reactors Section. Projected staffing is 13 full-time employees for fiscal year 2003.

Security and Oversight of Special Nuclear Materials

NRC continues its efforts to ensure that the necessary post-9/11 security compensatory measures are implemented at research and test reactors. Licensees' site-specific plans to implement compensatory measures, once approved by NRC staff and implemented by the licensee, will be verified by NRC inspection. OIG gathered information about security and safeguards and shared our observations with agency managers. However, because of its sensitivity and the status of the new requirements, this report does not comment in that area.

The Office of the Inspector General (OIG) recently reported on NRC's oversight of special nuclear material, which included such material at research and test reactors.[1] Therefore, that area is not covered in this report.

PURPOSE

Because of the agency's focus on commercial power reactors, there was concern that research and test reactor oversight might not have been getting adequate attention, especially in the current heightened security environment. OIG conducted this audit to determine whether NRC's oversight of research and test reactors is meeting NRC's expectations.

RESULTS IN BRIEF

At the time of this audit, and for the activities reviewed, oversight of research and test reactors was meeting NRC's expectations. For example, staff met goals for reviewing and approving licensee requests for changes to their licenses and licensee demand to license reactor operators. In addition, inspection requirements were generally satisfied.

However, some aspects of oversight can be improved. Specifically,

- Improve guidance for inspection follow-up items. NRC guidance documents are an important management control and, therefore, should provide clear direction for conducting agency activities. However, there is no guidance describing for *licensees* what an *inspection follow-up item* means in regulatory terms. As a result, licensees may fail to act according to NRC's expectations (see pp. 4-5).

- Improve the operating plan. NRC offices prepare operating plans to show planned accomplishments (activities) and performance measures and targets. However, one of the two research and test reactor planned

[1] OIG-03-A-15, titled, *Audit of NRC's Regulatory Oversight of Special Nuclear Materials*, May 23, 2003.

accomplishments[2] does not represent a discrete level of activity and current performance measures do not comply with guidance. As a result, it is difficult for management to monitor performance and resource usage for three distinct, important activities. Additionally, management does not have sufficient performance information to most effectively ensure performance is adequate. (see pp. 6-7).

- Increase the information available to the public. NRC's web site provides the public with access, as appropriate, to NRC's Inspection Manual, inspection procedures, and inspection reports. However, the web site version of the Inspection Manual does not show the specific inspection procedures to be performed by inspectors at each research and test reactor, and inspection reports do not always show all of the inspection procedures performed by inspectors. As a result, the public may not be adequately informed of NRC's inspection activities and this may affect the public's ability to effectively participate in or make reasonable judgments about the adequacy of NRC's research and test reactor inspection program (see pp. 8 - 9).

- Document refresher and continuing inspector training. NRC requires certain training to ensure an overall level of inspector performance and to keep up-to-date with changes to the inspection program. While forums exist to provide this training, management does not document the results. Consequently, employee training records do not show compliance with training requirements (see pp. 10-11).

Enhancements in these areas will result in more efficient and effective oversight.

MANAGEMENT ACTIONS

Based on meetings about audit results held during fieldwork, Research and Test Reactor Section officials have initiated discussion and staff assignments to resolve each of the findings and recommendations in this report.

RECOMMENDATIONS

This report recommends six improvements to the oversight of research and test reactors (see page 12 for a consolidated list).

[2] These two planned accomplishments are in the Office of Nuclear Reactor Regulation operating plan.

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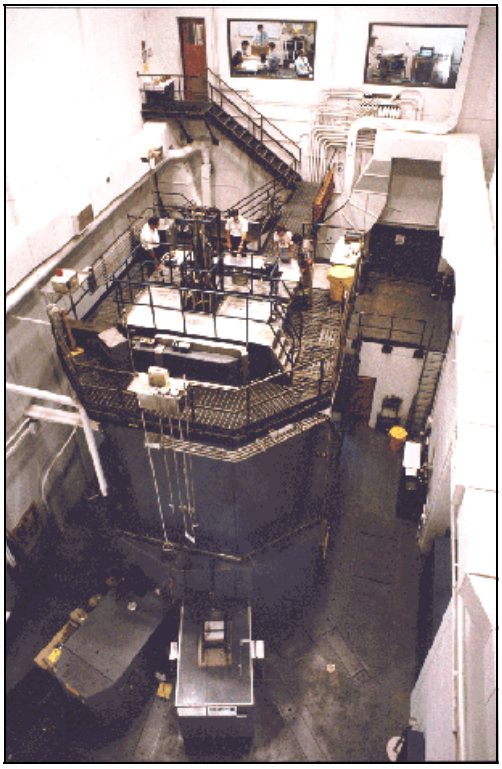
I. BACKGROUND

Research and test reactors (also called non-power reactors) are nuclear reactors whose primary function is the safe conduct of research and development activities. Almost every field of science makes use of these reactors, which are also used to educate students for careers in the nuclear power industry, national defense, and research. The U.S. Nuclear Regulatory Commission (NRC) currently licenses 50 research and test reactors. Thirty-five of those are operating in 23 states. Fifteen others are no longer operating and are being decommissioned.

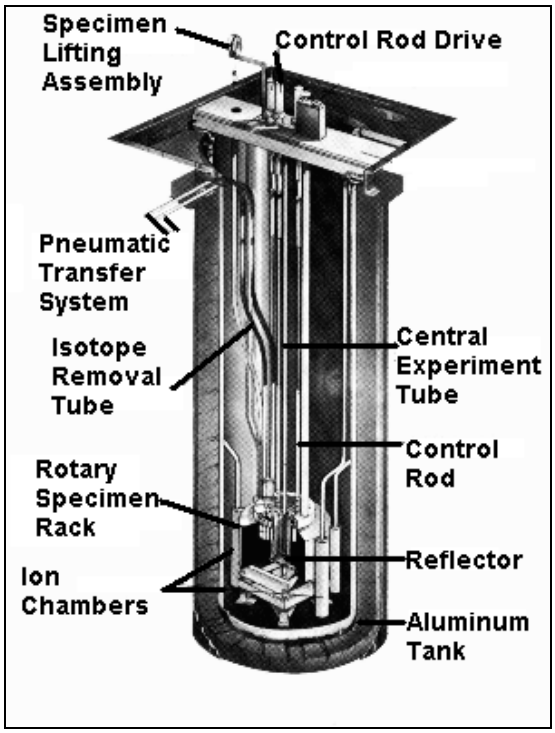


A research reactor showing the experiment bays and control room.

In contrast to commercial nuclear power facilities, most non-power reactors are located in urban areas with the majority located on university campuses. The facilities typically range in power output from 0.10 watts to 20 megawatts (thermal) and most produce less than 1/1000th the power of a commercial power reactor. Unlike commercial power plants, facility staff regularly work in the reactor room or building during operation.

Research and Development Activities

Radiation produced by the reactor is used in a variety of research activities at non-power reactor facilities. Researchers insert samples of materials in the reactor core or immediately outside the core to expose the samples to neutrons and gamma radiation. By measuring neutron scattering off a test sample (e.g., superconductors, polymers, metals, and proteins), researchers can analyze molecular structure, surfaces and interfaces, measure electronic and magnetic properties, stress and strain conditions, and gauge other characteristics.



Cutaway view of a research reactor

Non-power reactors are routinely used to precisely measure the presence of trace elements like environmental pollutants in soil, water, air and foods. They are also used in the production of radiopharmaceuticals and the development of treatments for shrinking cancerous tumors.

Licensing

Research and test reactors are initially licensed under a two-step process, which requires that NRC approve both a construction permit and an operating license. After the facility is operating, certain changes to the operating license[3] require NRC review and approval.

Operator Licensing

NRC tests and licenses research and test reactor operators to ensure that they have the required knowledge and skills to safely control the reactor and the ability to handle accidents. The agency administers a comprehensive written examination and also requires a hands-on demonstration of the candidate's ability to control the reactor.

Inspections

NRC inspects each facility periodically to ensure that programs are conducted according to requirements. Areas inspected include, but are not limited to, organizational structure, qualifications and responsibilities, operational activities, review and audit functions, radiation and environmental protection, maintenance and surveillance activities, fuel handling, experiments, emergency preparedness, material control and accounting, and safeguards and security.

[3] License amendments or changes to the facility's technical specifications.

Organization and Fees

Between 1995 and 1997, NRC consolidated research and test reactor oversight to headquarters to provide (1) additional assurance of regulatory consistency, (2) more direct focus on non-power reactor safety issues and regulatory matters, (3) enhanced efficiency and flexibility in the use of resources by combining functions, and to (4) extend and broaden employee responsibilities and functions. Oversight is currently conducted by staff in the Research and Test Reactors Section of the Office of Nuclear Reactor Regulation. For fiscal year 2003, the projected staffing is about 13 full-time employees.

Because most research and test reactors are located at nonprofit educational institutions which are granted fee exemptions, in FY 2002 only four research reactor facilities were subject to fees. Approximately $285,600 of budgeted costs were recovered through annual fees, resulting in $71,400 in fees to each of the four facilities.

Security and Oversight of Special Nuclear Materials

NRC continues its efforts to ensure that the necessary post-9/11 security compensatory measures are implemented at research and test reactors. Licensees' site-specific plans to implement compensatory measures, once approved by NRC staff and implemented by the licensee, will be verified by NRC inspection. OIG gathered information about security and safeguards and shared our observations with agency managers. However, because of its sensitivity and the status of the new requirements, this report does not comment in that area.

OIG recently reported on NRC's oversight of special nuclear material[4], which included such material at research and test reactors.[5] Therefore, that area is not covered in this report.

II. PURPOSE

Because of the agency's focus on commercial power reactors, there was concern that research and test reactor oversight might not have been getting adequate attention, especially in the current heightened security environment. OIG conducted this audit to determine whether NRC's oversight of research and test reactors is meeting NRC's expectations.

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[4] Special nuclear material is plutonium, uranium-233, uranium enriched in the isotopes uranium-233 or uranium-235, and any other material NRC determines to be special nuclear material. Practical uses include the fuel for research and test reactors.

[5] OIG-03-A-15, titled, *Audit of NRC's Regulatory Oversight of Special Nuclear Materials,* May 23, 2003.

III. FINDINGS

At the time of this audit and for the activities reviewed, oversight of research and test reactors was meeting NRC's expectations. For example, staff met goals for reviewing and approving licensee requests for changes to their licenses and licensee demand to license reactor operators. In addition, inspection requirements were generally satisfied. However, aspects of NRC's oversight can be improved. Specifically, management should:

- Improve guidance for inspection follow-up items,
- Improve the operating plan,
- Increase the information available to the public, and
- Document refresher and continuing inspector training.

Enhancements in these areas will result in more efficient and effective oversight.

A. OVERSIGHT IS MEETING NRC'S EXPECTATIONS

Several components of NRC's regulatory process characterize the expectations of its oversight of research and test reactors, including:

- licensing applicants to use nuclear materials or operate nuclear facilities,
- overseeing licensee operations and facilities to ensure that licensees comply with safety requirements, and
- evaluating operational experience at licensed facilities or involving licensed activities.

Despite the internal redirection of significant resources to addressing security issues subsequent to 9/11, research and test reactor oversight has, for the activities reviewed, met NRC's expectations. For example:

- staff reviewed and approved licensee requests for changes to their licenses in accordance with requirements,
- staff met licensees' demand for licensing reactor operators,
- staff are generally meeting or exceeding inspection requirements,
- staff conduct assessments of operating experience at facilities, and

B. IMPROVE GUIDANCE FOR INSPECTION FOLLOW-UP ITEMS

NRC guidance documents are an important management control and, therefore, should provide clear direction for conducting agency activities. However, there is no guidance describing for *licensees* what an *inspection follow-up item* means in regulatory terms. As a result, licensees may fail to act according to NRC's

expectations. NRC can further enhance licensee and public understanding of the inspection process by providing guidance for inspection follow-up items.

Provide Guidance for Inspection Follow-up Items

The Need for Inspection Follow-up Item Guidance

Clear guidance helps to ensure effective and efficient use of valuable agency resources and consistent regulation of NRC licensees. NRC's Inspection Manual provides guidance for its inspectors on inspection report content. The manual describes an inspection follow-up item as a matter that requires further inspection effort because of a potential problem, because specific licensee or NRC action is pending, or because additional information is needed that was not available at the time of the inspection. When questions exist about the adequacy of a licensee's completed or planned corrective actions for such items, the inspector may choose to create an inspection follow-up item to ensure that the licensee's later actions are evaluated.[6] A specific inspection procedure describes NRC's process to further review and evaluate inspection follow-up items with respect to status of completion, expediency of completing the open item, and effectiveness of completion.

Inspection Follow-up Item Guidance Should be Clarified

No guidance exists for *licensees* describing what an inspection follow-up item means in regulatory terms. The inspection manual does provide guidance to NRC *inspectors* for identifying and documenting inspection follow-up items. However, nothing describes the responsibilities of the licensee when an inspector places an inspection follow-up item in an inspection report and what will happen if a licensee does not take corrective action. Licensees confirmed that requirements for inspection follow-up items are not clear.

Without a clear understanding of inspection follow-up items, their possible significance, and what is expected to address those items, licensees may fail to act according to NRC's expectations. In addition, the public cannot be assured that licensees will consistently and adequately take corrective action on inspection follow-up items.

RECOMMENDATION

OIG recommends that the Executive Director for Operations:

1. Provide guidance for licensees describing the regulatory implications of, and licensee requirements for, inspection follow-up items.

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[6] For example, in one inspection report an inspector opened an inspection follow-up item to track a licensee's efforts to implement an effective audit program for operations. The inspector had reviewed that area and found that no formal audit program had been developed by the licensee.

C. IMPROVE THE OPERATING PLAN

NRC offices prepare operating plans to show planned accomplishments (activities) and performance measures and targets. However, one of the two research and test reactor planned accomplishments[7] does not represent a discrete level of activity and current performance measures, as a whole, do not comply with guidance. As a result, it is difficult for management to make improvements in resource usage for three distinct, important activities. Additionally, management does not have sufficient information to gauge whether performance in these activities is adequate and to ensure optimal performance. NRC can increase management's ability to monitor and improve performance by (1) revising planned accomplishments, and (2) improving performance measures for planned accomplishments.

Revise Planned Accomplishments

The Need for Research and Test Reactor Planned Accomplishments

A planned accomplishment (activity) should represent a level of discrete activity where staffing and budgetary resources can be identified.[8] For example, a planned accomplishment might consist of research and test reactor inspection activity. NRC's planning, budgeting, and performance management process works to achieve organizational effectiveness by identifying planned accomplishments and the resources necessary to achieve desired outcomes for each activity. Offices prepare operating plans which show planned accomplishments and include performance measures and resource information. The operating plan performance information defines and measures success for each planned accomplishment.

Two planned accomplishments represent the critical activities in the research and test reactor area. Although staff charge time to other planned accomplishments, only these two have associated performance measures in the operating plan. Each planned accomplishment is used in NRC's time and labor system for recording hours worked by employees in each area. The two activities are:

- Project Management, Licensing, Operator Licensing
- Inspections

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[7] These two planned accomplishments are in the Office of Nuclear Reactor Regulation operating plan.

[8] Memorandum from the Chief Financial Officer and the Executive Director for Operations to the Chairman and Commissioners: *Update to the Planning, Budgeting, and Performance Management Process*; July 19, 2002.

Planned Accomplishments Should be Revised

The project management, licensing, and operator licensing planned accomplishment does not represent a discrete level of activity where budgetary and staffing resources can be identified. In fact, in fiscal year 2002, almost forty percent of all time worked by research and test reactor staff was charged to this one planned accomplishment.[9] Managers cannot effectively determine the amount of time staff spend performing those three distinct activities. As a result, it is difficult to make improvements to performance and in resource use for the three important, discrete activities within this planned accomplishment. To make improvements in the use of staff time, this type of information should be readily available to managers. A senior manager agreed this planned accomplishment should be split.

RECOMMENDATION

OIG recommends that the Executive Director for Operations:

2. Revise research and test reactor planned accomplishments to reflect discrete activity levels.

Improve Performance Measures for Planned Accomplishments

The Need for Research and Test Reactor Performance Measures

Managers use performance measures to analyze performance and to report on the results of activities. Performance measures should align with the agency's mission, identify outputs, identify the aspect of performance to measure, and establish performance goals or targets. Outputs include measurable characteristics of a program's planned accomplishments such as quality, effectiveness, and efficiency.

NRC has established guidelines for output measures for planned accomplishments. A model was provided for output measures, which included metrics, as appropriate, for effectiveness, efficiency, quality, quantity, and timeliness. Offices were generally required to establish, at a minimum, an effectiveness metric at the planned accomplishment level.

[9] For comparison, about seven percent of staff time was charged to the inspections planned accomplishment - a discrete activity. The balance of staff time was charged to planned accomplishments that do not have performance measures or represent work done for infrequent activities or for other offices. For example, about 17 percent of time was charged to absence and a total of about 17 percent was charged to the clerical support, supervision, and staff development activities. Overall, staff charged time to 33 different planned accomplishments.

The performance measures in the operating plan for the two research and test reactor planned accomplishments (described in the previous section of this report) include, for example:

- counts of licensing actions completed - a quantity measure,
- counts of operator licensing examinations completed - a quantity measure,
- hours used per licensing action - an efficiency measure,
- licensing actions completed within one year - a timeliness measure, and
- resources used for inspection activity within ± 15 percent of budget - no category.

Performance Measures Should be Improved

As a whole, the performance measures in the operating plan do not meet the intent of the guidance. Specifically,

□ The measures for each planned accomplishment do not include some of the appropriate performance categories. Most importantly, there are no effectiveness or quality measures.

□ Under each planned accomplishment, there are measures of whether the budget was met within, for example, ± 15 percent. These metrics measure management's ability to develop accurate budgets, an administrative activity, not a planned accomplishment activity.

As a result, management cannot use the existing performance information to most effectively manage resources and ensure optimal performance.

RECOMMENDATION

OIG recommends that the Executive Director for Operations:

3. Develop performance measures for research and test reactor activities in accordance with guidance.

D. INCREASE THE INFORMATION AVAILABLE TO THE PUBLIC

NRC's web site provides the public with access, as appropriate, to NRC's Inspection Manual, inspection procedures, and inspection reports. However, the web site version of the Inspection Manual does not provide a list of the specific inspection procedures that inspectors perform at each research and test reactor and inspection reports do not always show all of the inspection procedures performed by inspectors. As a result, the public is not adequately informed of

NRC's inspection activities and cannot effectively participate in or make reasonable judgments about the adequacy of NRC's inspection program. NRC can increase public confidence in its oversight of research and test reactors by (1) more fully informing the public of the inspection program, and (2) improving documentation of inspection work performed.

More Fully Inform the Public of NRC's Inspection Program

The Need to Provide Inspection Program Information to the Public

NRC's web site provides the public with access, as appropriate, to NRC's Inspection Manual and inspection procedures for all licensees. NRC's strategic plan emphasizes that NRC builds and maintains public trust and confidence by providing stakeholders with clear and accurate information about NRC's regulatory programs. The inspection manual establishes the uniform inspection methodology for research and test reactors. Specific inspection procedures provide guidance for performing inspections of various licensee activities. For example, procedures exist for inspecting the adequacy of licensees' operational activities, radiation and environmental protection, maintenance and surveillance activities, fuel handling, experiments, emergency preparedness, material control and accounting, and safeguards and security.

More Information Should be Provided to the Public

The inspection manual on the web site references tables that list the specific inspection procedures to be performed at each research and test reactor facility. However, the manual does not contain the tables. The web site lists hundreds of inspection procedures, but only about 20 are used at research and test reactors. The remaining inspection procedures are used, for example, at commercial power reactors, fuel cycle facilities, and materials licensees. Without the tables, it is not feasible for the public to determine which procedures NRC has committed to perform at each research and test reactor. As a result, the public may not be adequately informed of NRC's inspection activities and this may affect the public's ability to effectively participate in or make reasonable judgments about the adequacy of NRC's research and test reactor inspection program.

RECOMMENDATION

OIG recommends that the Executive Director for Operations:

4. Post, on the public web site, the tables listing the specific inspection procedures being performed at research and test reactors.

Improve Documentation of Inspection Work

The Need for Guidance for Documenting Inspection Results

NRC inspection reports communicate significant inspection results to licensees, NRC staff, and the public. The reports also provide conclusions about the effectiveness of the programs or activities inspected. NRC's Inspection Manual provides that inspection reports should contain sufficient detail to understand the findings and include details such as inspection procedures used, the exact component inspected, and other similar details. As official agency records, the level of detail used in inspection reports is important as a tool for research and for obtaining historical perspective of licensees' performance.

Documentation Should be Improved

Inspection procedures that are being performed are not referenced in inspection reports. Review of inspection reports over a recent three year period indicated that some inspection procedures performed were not referenced in the inspection report. Inspectors confirmed that they do not necessarily reference all inspection procedures used in the associated inspection report.

As a result, the public may not be adequately informed of NRC's inspection activities and this may affect the public's ability to effectively participate in or make reasonable judgments about the adequacy of NRC's research and test reactor inspection program. As official agency records, inspection reports with incomplete documentation will not be effective as a tool for research and historical perspective, or for future planning.

RECOMMENDATION

OIG recommends that the Executive Director for Operations:

5. Revise management controls to ensure all inspection procedures performed are documented in inspection reports.

E. DOCUMENT REFRESHER AND CONTINUING INSPECTOR TRAINING

NRC requires certain training to ensure an overall level of inspector performance and to keep up-to-date with changes to the inspection program. While forums exist to provide this training, management does not document the results. Consequently, employee training records do not reflect compliance with training requirements.

The Need for Refresher and Continuing Training Requirements

NRC's Inspection Manual defines the core training requirements for research and test reactor inspectors. As opposed to other, similar inspectors, the manual states that there is no specific, routine refresher training for research and test reactor inspectors. However, the manual provides that inspector training does not end when an inspector is fully certified and requires:

(1) refresher training to ensure inspectors maintain an overall level of performance, and

(2) continuing training with the expectation that staff build on what was learned in initial training as well as to keep up to date with changes to the inspection program.

Refresher and Continuing Training Should be Documented

Management stated they provide quarterly all-hands meetings and other forums where current information is exchanged to ensure that staff, including inspectors, remain current with training and knowledge. These activities provide inspectors with refresher and continuing training. However, because this training is not documented, employee training records do not reflect compliance with requirements.

RECOMMENDATION

OIG recommends that the Executive Director for Operations:

6. Formally document and track refresher and continuing training provided for research and test reactor inspectors.

IV. MANAGEMENT ACTIONS

OIG held meetings during the audit with NRC staff to discuss audit results. Based on these meetings, Research and Test Reactor Section officials have initiated discussion and staff assignments to resolve each of the findings and recommendations in this report.

V. CONSOLIDATED LIST OF RECOMMENDATIONS

OIG recommends that the Executive Director for Operations:

1. Provide guidance for licensees describing the regulatory implications of, and licensee requirements for, inspection follow-up items.

2. Revise research and test reactor planned accomplishments to reflect discrete activity levels.

3. Develop performance measures for research and test reactor activities in accordance with guidance.

4. Post, on the public web site, the tables listing the specific inspection procedures being performed at research and test reactors.

5. Revise management controls to ensure all inspection procedures performed are documented in inspection reports.

6. Formally document and track refresher and continuing training provided for research and test reactor inspectors.

VI. AGENCY COMMENTS

At an exit conference held on May 21, 2003, NRC officials generally agreed with the report's findings and recommendations. While agency officials chose not to provide a formal, written response for inclusion in the report, they did provide editorial suggestions which have been incorporated where appropriate.

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SCOPE AND METHODOLOGY

To address the objective of this audit, we discussed research and test reactor oversight with:

- NRC headquarter's staff,
- licensee officials,
- a public interest group, and
- an NRC Agreement State representative.

We conducted site visits to a sample of operating and decommissioning research and test reactors. We also reviewed related inspection reports, licensing documents, other work products, guidance documents, and the current operating plan.

OIG recently reported on NRC's oversight of special nuclear material which included such material at research and test reactors.[10] Therefore, that area is not covered in this report.

NRC continues its efforts to ensure that the necessary post-9/11 security compensatory measures are implemented at research and test reactors. Licensees' site-specific plans to implement compensatory measures, once approved by NRC staff and implemented by the licensee, will be verified by NRC inspection. We gathered information about security and safeguards and shared our observations with agency managers. However, because of its sensitivity and the status of the new requirements, this report does not comment in that area.

Our work was conducted in accordance with generally accepted Government auditing standards and included a review of management controls related to the objective of this audit. This audit was conducted from September 2002 to April 2003. The major contributors to this report were Robert Moody, Audit Manager, and Yvette Russell, Senior Auditor.

[10] OIG-03-A-15, titled, *Audit of NRC's Regulatory Oversight of Special Nuclear Materials,* May 23, 2003.