June 23, 2003

Dr. James C. Williams, Dean
College of Engineering
Engineering Experiment Station
Ohio State University
142 Hitchcock Hall
Columbus, OH 43210

SUBJECT: NRC INSPECTION REPORT NO. 50-150/2003-201

Dear Dr. Williams:

This letter refers to the inspection conducted on April 14-18, 2003, at your Ohio State University Research Reactor facility. The inspection included a review of activities authorized for your facility. The enclosed report presents the results of that inspection.

Various aspects of your safety program were inspected including selective examinations of procedures and representative records, and interviews with personnel. Based on the results of this inspection, no safety concerns or noncompliances of NRC requirements were identified. No response to this letter is required.

In accordance with 10 CFR 2.790 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at (the Public Electronic Reading Room) http://www.nrc.gov/NRC/ADAMS/index.html.

Should you have any questions concerning this inspection, please contact Thomas Dragoun in the King of Prussia, Pennsylvania office at 610-337-5373.

Sincerely,

/RA Daniel E. Hughes, Acting for/

Patrick M. Madden, Section Chief
Research and Test Reactors Section
Operating Reactor Improvements Programs
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

Docket No. 50-150
License No. R-75

Enclosure: NRC Inspection Report No. 50-150/2003-201
cc w/encl: Please see next page

cc:

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ATTN: Radiological Health
Program Director
P.O. Box 118
Columbus, OH 43216

Ohio Environmental Protection Agency
Division of Planning
Environmental Assessment Section
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U. S. NUCLEAR REGULATORY COMMISSION
OFFICE OF NUCLEAR REACTOR REGULATION

Docket No:	50-150
License No:	R-75
Report No:	50-150/2003-201
Licensee:	Ohio State University
Facility:	Ohio State University Research Reactor
Location:	Columbus, Ohio
Dates:	April 14 - 18, 2003
Inspector:	Thomas Dragoun
Approved by:	Patrick M. Madden, Section Chief Research and Test Reactors Section Operating Reactor Improvements Programs Division of Regulatory Improvement Programs Office of Nuclear Reactor Regulation

EXECUTIVE SUMMARY

Ohio State University
Report No: 50-150/2003-201

The primary focus of this routine, announced inspection was the on-site review of selected aspects of the licensee's Class II non-power research reactor operation including: organization and staffing; operations logs and records; procedures; operator requalification; surveillance; radiation protection program; committees, reviews, and audit functions; emergency planning; special nuclear material control and accountability; and physical security.

Organization and Staffing

- Staffing, reporting, and record keeping met the requirements specified in Technical Specification Section 6.1.

Operations Logs and Records

- Records were kept in accordance with the regulatory and licensee administrative requirements.

Procedures

- The procedural control and implementation program satisfied Technical Specification requirements.

Operator Requalification

- The requalification/training program was up-to-date and acceptably maintained. Medical examinations were being completed as required.

Surveillance

- The program for surveillance and Limiting Conditions for Operation confirmations was being carried out in accordance with Technical Specification Section 4 requirements.

Radiation Protection Program

- The inspector determined that, because: 1) surveys were being completed and documented acceptably to permit evaluation of the radiation hazards that might exist; 2) postings met regulatory requirements; 3) personnel dosimetry was being worn as required and doses were well within the licensee's procedural action levels and the NRC's regulatory limits; and, 4) radiation monitoring equipment was being maintained and calibrated as required, the Radiation Protection Program being implemented by the licensee satisfied regulatory requirements.

Committees, Review, and Audit Functions

- Audits and oversight of the reactor operations program were being conducted by the Reactor Operations Committee according to the requirements specified in the Technical Specifications. Annual reviews of the Radiation Protection Program were being completed by the licensee as required by 10 CFR Part 20.

Emergency Planning

- The NRC approved Emergency Plan was acceptably implemented.

SNM Control and Accountability

- The licensee was acceptably controlling and tracking Special Nuclear Material as required by 10 CFR Part 70.

Physical Security

- The regulatory requirements for the protection of special nuclear material were satisfied.

Report Details

Summary of Plant Status

The licensee's five-hundred kilowatt research reactor continues to be operated in support of undergraduate instruction, laboratory experiments, reactor operator training, and various types of irradiation projects. During the inspection, the reactor was operated to support a student laboratory experiment and a low power irradiation of a commercial fission chamber. The licensee's programs were directed toward the protection of public health and safety and were in compliance with NRC requirements.

1. Organization and Staffing

a. Inspection Scope (Inspection Procedure (IP) 69001)

The inspector reviewed the following regarding the licensee's organization and staffing to ensure that the requirements of Technical Specification (TS) Section 6.1, Amendment No. 17, dated March 6, 1997, were being met:

- organizational structure
- management responsibilities and authorities
- staffing requirements for safe operation of the research reactor facility

b. Observations and Findings

Since the last NRC inspection (refer to NRC Inspection Report No. 50-150/2001-01), personnel in three of the management levels described in TS Figure 6.1 were replaced. The NRC was notified of these changes as required by TS 6.6.2(3)(C). Letters to the NRC regarding the appointment of the new Director, Engineering Experiment Station, the new Director, Nuclear Reactor Laboratory (NRL), and the new Associate Director, Nuclear Reactor Laboratory were dated July 11, 2001, October 24, 2002, and January 7, 2003, respectively. The responsibility and authority of these positions remained unchanged. Discussions with the NRL Director indicated that management support and commitment to continued safe operation of the facility has not changed.

Facility staff consists of three full time positions, all with reactor operating licenses.

Discussions with the Radiation Safety Officer (RSO) indicated that his department had undergone restructuring and title changes. Some changes were reflected in the proposed TS submitted with a license renewal application in December 1999. The inspector stated that the licensee should consider submitting a change to the current TS to demonstrate that the RSO had adequate independence and authority after the reorganization. Licensee management stated that this matter would be reviewed.

c. Conclusions

Staffing, reporting, and record keeping met the requirements specified in TS Section 6.1.

2. Operations Logs and Records

a. Inspection Scope (IP 69001)

The inspector reviewed the following to ensure that selected records were maintained as required by TS Sections 6.6.1, 6.7 and 10 CFR 20 Subpart L:

- Procedure AP-10, “Console Operating Experience Record” Revision 4, dated March 14, 1996
- Procedure AP-11, “Recordkeeping” Revision 2, dated March 28, 1996
- Procedure OM-08, “Reactor Logbook Records” Revision 7, dated November 28, 2000
- Licensee Annual Report dated September 23, 2002
- Console logs for the period February 22, 2001 through September 19, 2002
- Personnel radiation exposure data for 2002

b. Observations and Findings

Reactor operations records were reviewed and found to be maintained in accordance with the administrative requirements. Radiation protection records were similarly maintained by the Radiation Safety Section and readily available. The annual report provided summaries of all records as required by TS 6.6.1. Console log records consisted of printed forms listing the information to be recorded. This structured approach resulted in records that were consistent, clear, well organized, and readily retrievable.

c. Conclusions

Records were kept in accordance with the regulatory and licensee administrative requirements.

3. Procedures

a. Inspection Scope (IP 69001)

The inspector reviewed the following procedures to determine if the requirements of TS Section 6.3 were being met:

- Procedure IM-01, “Scram Checks” Revision 6, dated December 30, 1999
- Procedure IM-03, “OSURR Pre-Start Checkout” Revision 12, dated November 29, 2000
- Procedure IM-04, “Post-Shutdown Checkout” Revision 10, dated November 29, 2000
- Procedure IM-05, “Core Reactivity Data” Revision 1, dated April 26, 2001
- Procedure IM-07, “Rod Parameter Testing” Revision 5, dated December 16, 1997
- Procedure IM-12, “Reactor Instrumentation Calibration/Checks” Revision 7, dated October 31, 2002
- Procedure OM-02, “Control Rod Annual Inspections” Revision 1, dated June 5, 1997

- Procedure OM-07, “Fuel Element Inspections” Revision 6, dated April 25, 2001
- Procedure OM-15, “Process System Checks” Revision 2, dated April 25, 2001
- Procedure OM-16, “Power Calibration” Revision 2, dated November 4, 2002
- Procedure EP-01, “Emergency Procedures” Revision 16, dated October 31, 2002
- Procedure AP-07, “Review of Procedures” Revision 15, dated October 31, 2002
- Procedure AP-08, “NRL Audit” Revision 3, dated October 1, 2002
- Procedure AP-05, “SNM Inventory” Revision 3, dated December 22, 1995
- Procedure AP-09, “RO/SRO Requalification” Revision 7, dated September 25, 1996
- Procedure AP-11, “Record Keeping” Revision 2, dated March 28, 1996
- Procedure AP-06, “Format for Writing, Revising, and Approving Procedures” Revision 7, dated March 19, 1996

b. Observations and Findings

The inspector determined that written procedures were available for the activities delineated in TSs 6.3.1 and 6.3.2 and were approved by the Reactor Operations Committee (ROC) as required by TS 6.2.4(2). The clarity and detail in the procedures was satisfactory. Compliance with the applicable procedures was observed during the reactor startups and shutdowns. The ROC audits the adherence to procedures annually as required by TS 6.2.5(1). The routing/sign-off slip used to circulate revised procedures to the reactor operators was retained with the original copy as proof of review.

Procedures were required to be reviewed biennially and updated as needed. During NRC Inspection 50-150/2001-201 conducted in March 2001, the inspector noted that the procedures were due or overdue for this review and update. (This had also been noted during a ROC audit.) The licensee began to review the procedures and most of these procedures did not require any changes. During this inspection, the inspector determined that the review was completed. Licensee action for this matter is complete and satisfactory. Inspector Follow-up Item 50-150/2001-201-01 is closed.

The inspector noted that operations procedure AP-05 regarding SNM inventories and a corresponding health physics procedure RS-HP-SNM-1.0 Revision 2 need some minor revision to conform with the recent changes in the reporting requirements of the Nuclear Materials Management and Safeguards System (NMMSS). Facility management stated that this would be completed by August 31, 2003. This matter will be reviewed in a future inspection (Inspector Follow-up Item 50-150/2003-201-01).

c. Conclusions

The procedural control and implementation program satisfied Technical Specification requirements.

4. Operator Requalification

a. Inspection Scope (IP 69001)

To determine that operator requalification activities, training, and medical evaluations were conducted as required, the inspector reviewed:

- active license status
- logs and records of reactivity manipulations, data for years 2001 and 2002
- training records
- medical examination results
- annual written examinations for 2001 and 2002
- Procedure AP-09, “RO/SRO Requalification” Revision 7 dated September 25, 1996

b. Observations and Findings

The licensee currently has three qualified senior reactor operators (SROs) and the inspector verified that their licenses were current.

The Requalification Program was maintained up-to-date. Records showed that operator training was consistent with the Requalification Program requirements. Records of reactivity manipulations, other operations activities, and SRO activities were being maintained. Records of demonstrated reactor proficiency, written examination results, and reviews of procedure changes were also on file. The operators were current in their training and requalification program. The inspector also verified that the operators were receiving the required medical examinations at the required frequency.

c. Conclusions

The requalification/training program was up-to-date and acceptably maintained. Medical examinations were being completed as required.

5. Surveillance

a. Inspection Scope (IP 69001)

To determine that surveillance and Limiting Conditions for Operation (LCO) verifications were being completed as required by TS Section 4, the inspector reviewed:

- Procedure IM-05, “Core Reactivity Data” Revision 1, dated April 26, 2001. Data for September 16, 2002, September 17, 2001, and October 5, 2000
- Procedure RS-03, “Calibrating Gaseous Effluent Monitor” Revision 5, dated April 24, 2001. Data for November 19, 2002 and October 29, 2001
- Procedure IM-12, “Reactor Instrumentation Calibration/Checks” Revision 7, dated October 31, 2002. Data for October 2, 2003
- Monthly surveillance work schedule. Data for January to December 2002

b. Observations and Findings

The inspector noted that selected daily, monthly, quarterly, semiannual, and annual checks, tests, and/or calibrations for TS-required surveillance and LCO verifications were completed as stipulated. The verifications were completed on schedule and in accordance with licensee procedures. All the recorded results were within the TS and procedurally prescribed parameters. The records and logs were noted to be generally complete and were being maintained as required.

c. Conclusions

The program for surveillance and LCO confirmations was being carried out in accordance with TS Section 4 requirements.

6. Radiation Protection Program

a. Inspection Scope (IP 69001)

The inspector reviewed the following to verify compliance with 10 CFR Part 20:

- Health Physics Procedure RS-HP-AP-1.1, “Authorization for the Use of Radioactive Material”
- Health Physics Procedure RS-HP-OP-4.0, “Radiation Safety Instrumentation Program” Revision 1, dated January 14, 2003
- Health Physics Procedure RS-HP-OP-4.1, “Calibration of Radiological Survey Instruments” Revision 2, dated August 20, 2001
- Health Physics Procedure RS-HP-OP-3.1, “Decontamination and Release of Material” Revision 2, dated November 18, 2002
- Health Physics Procedure RS-HP-OP-3.2, “Performing Radiation and Contamination Surveys” Revision 3, dated January 13, 2003. Data for February 19, January 14, 2003; December 17, November 25, October 7, September 13, August 19, July 18, June 24, May 28, April 30, and March 25, 2002
- Health Physics Procedure RS-HP-OP-3.4, “Air Sampling and Analysis” Revision 1, dated January 1, 2003
- Health Physics Procedure RS-HP-OP-3.7, “Emergency Response” Revision 1, dated January 13, 2003
- Health Physics Procedure RS-HP-SNM-1.0, “Special Nuclear Material Acquisition, Control, Receipt, Movement, and Inventory Reporting” Revision 2, dated January 4, 2000
- Nuclear Reactor Lab Procedure RS-15, “Radiation Safety” Revision 6, dated November 22, 1995
- Personnel monthly dosimetry results for 2002
- Environmental dosimetry results for the four TLDs inside the reactor building for April 23 and January 29, 2002, and October 19, 2001; for the eight TLDs outside of the reactor building for April 23 and January 21, 2002, and October 15 and August 17, 2001
- Annual audits of the HP program dated February 6, 2002 and February 11, 2003
- Nuclear Reactor Lab Procedure RS-09, “Area Radiation Surveys” Revision 5, dated December 23, 1997. Weekly data or dates that the reactor was operated for the period January to December 2002
- Nuclear Reactor Lab Procedure RS-08, “NRL Smear Survey” Revision 10, dated April 3, 2003. Weekly data for the period January to December 2001

b. Observations and Findings

(1) Surveys

The inspector reviewed the weekly general area dose rate and contamination surveys completed by the reactor staff and the monthly contamination and dose rate surveys completed by the Radiation Services Section (RSS) for years 2001 and 2002. Routine surveys had been completed by the RSS as required by procedure RS-HP-OP-3.2. The number and location of survey points was adequate to characterize the radiological conditions. The survey also included a checklist of items to be verified such as the adequacy of warning signs and postings in the area. The survey results were made available for review through the University's Internet web page.

Surveys by the reactor staff were conducted in accordance with operating procedures RS-08 and RS-09. These surveys were completed each day the reactor was operated or weekly during shut downs. The survey data sheets included an acceptance range for the data to allow identification of abnormal conditions.

(2) Postings and Notices

The inspector reviewed the postings at the entrances to various controlled areas including the Reactor Bay, and radioactive material storage areas. The postings were acceptable and indicated the radiation and contamination hazards present. The facility's radioactive material storage areas were noted to be properly posted. No unmarked radioactive material was found in the facility. A copy of current notices to workers required by 10 CFR Part 19 was posted at the entrance to the Reactor Bay as well.

(3) Dosimetry

The licensee used a National Voluntary Laboratory Accreditation Program (NVLAP) accredited vendor (Landauer) to process personnel dosimetry (Luxel). An examination of the records for the past two years showed that all exposures were well within NRC limits and within licensee action levels. Most of the records showed personnel received exposures of only a few millirem above background. Through direct observation, the inspector determined that dosimetry was acceptably used by facility personnel.

Dosimeters are also used to monitor the exposure to the public. There were four environmental dosimeters located inside the periphery of the reactor building and eight environmental dosimeters at various distances exterior to the building. Data for year 2002 showed that exposures were well below the NRC limits. However, the inspector noted significant anomalies in the data involving hundreds of mrem. The questionable results were from the dosimeters located in the exterior area at the rear of the reactor building. In this area there is a nearby building occupied by the State of Ohio Emergency Response agency. The reactor staff believed that this agency was calibrating radiation survey instruments in the building and the scattered

radiation caused the elevated dosimeter readings. The licensee stated that the documentation for environmental dosimetry program will be reviewed and the impact of the State agency activities will be assessed. This review will be completed by August 31, 2003. This matter will be reviewed in a future inspection (Inspector Follow-up Item 50-150/2003-201-02).

(4) Radiation Monitoring Equipment

The calibration of portable survey meters, except neutron detectors, was typically completed by personnel from the RSS group. Calibration of fixed radiation detectors and air monitoring instruments was completed by the reactor staff. The calibration records of selected portable survey meters, fixed radiation detectors, and air monitoring equipment in use at the facility were reviewed. Calibration frequency met the requirements established in reactor operations procedures RS-04 and RS-06 and RSS procedure RS-HP-OP-4.1 and records were being maintained as required.

(5) Radiation Protection Program

The licensee's radiation protection program was established in the OSU Radiation Safety Guidebook and Records Manual and in the Radiation Safety Standards for the Ohio State University. The program required that all personnel who had unescorted access to the Reactor Bay (a radiation area) would receive training in radiation protection, policies, procedures, requirements, and facilities prior to entry. The inspector reviewed the training that was being conducted for licensee personnel in the area of radiation protection. An interactive computer based "short course" consisting of six modules provided the initial training. Completion of a read-and-sign training program provided by procedure RS-15 was required for access to the Reactor Bay. The training covered the topics required to be taught in 10 CFR Part 19 and the results of an examination indicated that the staff understood what was presented.

The licensee does not maintain a respiratory protection program but implements engineering controls, such as glove boxes, for work or experiments that could release airborne radioactivity. This method of control is the preferred approach provided by 10 CFR Part 20.

The licensee uses a "RS-1" form to specify the protective clothing and required safety measures for any activity on campus using radioactive material in accordance with procedure RS-HP-AP-1.1. For the reactor, this is similar to the radiation work permits used at some facilities.

(6) Facility Tours

The inspector toured the Control Room, Reactor Bay, and selected support laboratories and offices. Control of radioactive material and control of access to radiation and high radiation areas were acceptable. As noted earlier, the postings and signs for these areas were appropriate.

(7) Shipment of radioactive material

During a NRC inspection conducted in March 2000, the shipping papers and labeling for four shipments of radioactive material were found to be in violation of NRC and DOT regulatory requirements. A licensee letter dated May 12, 2000, described the corrective actions taken in response to the notice of violation. The inspector determined that the licensee actions were complete and satisfactory. However, no similar shipments of radioactive material were made in the interim. Violation 50-150/2000-201-01 is closed.

c. Conclusions

The inspector determined that, because: 1) surveys were being completed and documented acceptably to permit evaluation of the radiation hazards that might exist; 2) postings met regulatory requirements; 3) personnel dosimetry was being worn as required and doses were well within the licensee's procedural action levels and the NRC's regulatory limits; and, 4) radiation monitoring equipment was being maintained and calibrated as required, the Radiation Protection Program being implemented by the licensee satisfied regulatory requirements.

7. Committees, Review, and Audit Function

a. Inspection Scope (IP 69001)

The inspector reviewed the following to ensure that the committees, audits and reviews stipulated in the requirements of TS Section 6.2 , 10 CFR 50.59, and 10 CFR 20.1101 were being completed:

- Audit Subcommittee of the University Radiation Safety Committee functions
- Annual audits of the radiation safety program dated February 6, 2002, and February 11, 2003
- Reactor Operations Committee (ROC) membership and qualifications
- Reactor Operations Committee minutes of meeting for February 25, 2003; October 2, August 31, and February 28, 2002
- Independent audit reports of the reactor operations program to the ROC dated January 31, 2003, and December 7, 2001
- 50.59 Review, "Low-Pass Filter for the Period Safety Channel Input Signal" dated January 2, 2001
- 50.59 Review, "Primary Pump Replaced" dated January 13, 2003. ROC review dated January 13, 2003
- 50.59 Review, "Magnet Amplifier Swap" dated May 13, 2002. ROC review dated October 2, 2002

b. Observations and Findings

ROC meeting minutes showed that the committee met as required by the TS with a quorum being present. The qualification of the members satisfied TS requirements. The committee reviewed the independent audit findings of the reactor operations

program and instructed the staff on the corrective action to be taken for the reported deficiencies. Subsequent follow up and oversight by the ROC was found to be appropriate.

ROC review of equipment changes proposed in accordance with 10 CFR 50.59 were thorough. The inspector advised the licensee that the technical justification for some of the answers to the screening questions should be documented. The licensee stated that this matter would be reviewed.

The inspector also verified that the licensee had completed annual reviews of the Radiation Protection Program as required by 10 CFR 20.1101. All aspects of the program had been reviewed and areas were noted where improvements could be made. Commitments and/or improvements from the review completed the previous year were reviewed and progress was noted. The reviews were acceptable.

c. Conclusions

Audits and oversight of the reactor operations program were being conducted by the ROC according to the requirements specified in the TS. Annual reviews of the Radiation Protection Program were being completed by the licensee as required by 10 CFR Part 20.

8. Emergency Planning

a. Inspection Scope (IP 69001)

The inspector reviewed the following to verify the implementation of the Emergency Plan:

- Procedure EP-01, “Emergency Procedures” Revision 16, dated October 31, 2002
- Procedure EP-02, “Handling Precautions for Non-Radioactive Hazardous Materials” Revision 6, dated October 31, 2002
- Procedure EP-03, “Response to Scrams and Alarms” Revision 0, dated December 27, 1995
- Procedure EP-04, “Emergency Equipment Inventory” Revision 4, dated May 8, 2001
- Emergency Preparedness Plan for The Ohio State University Nuclear Reactor Laboratory dated December 1994
- Critiques of drills held December 17, 2001 and December 18, 2002
- Inventory of emergency supplies done December 13, 2001 and December 20, 2002
- Emergency Plan training for reactor staff held December 17, 2001 and December 17, 2002
- Annual reviews conducted in accordance with section 5.10 of the Emergency Plan dated December 10, 2001 and December 2, 2002

b. Observations and Findings

Drill scenarios were challenging and involved response by most of the support organizations. Critiques indicated that the Emergency Plan was properly implemented.

Emergency supplies were available in the locations described in the Plan. Records indicated that the inventories were verified at the specified intervals. The inspector, accompanied by the Associate Director NRL, verified the emergency kit contents during this inspection.

c. Conclusions

The NRC approved Emergency Plan was acceptably implemented.

9. Physical Security

a. Inspection Scope (IP 81431)

The inspector reviewed the following to verify compliance with the requirements in 10 CFR 73.67(f) for the physical protection of special nuclear material were met:

- access controls
- key control
- intrusion detection systems
- alarm response

b. Observation and Findings

The licensee is required to comply with the basic physical protection requirements in 10 CFR 73.67(f). Access controls, barriers, intrusion detecting systems, and alarms were in place. The inspector coordinated the intentional activation of security alarms. The identification of the alarm and the required response were properly identified by the campus police dispatcher.

The inspector observed a management meeting to discuss the response to the NRC Interim Compensatory Measures to enhance physical security in the post 9-11 environment. In attendance were: Campus Chief of Police, Campus Security Supervisor, Director NRL, Campus Public Relations Director, Radiation Safety Officer, Assistant Radiation Safety Officer, and Associate Director NRL. The meeting was the first held to coordinate the activities of the responsible departments. Some preliminary courses of action were decided.

c. Conclusion

The regulatory requirements for the protection of special nuclear material were satisfied.

10. Material Control and Accounting

a. Inspection Scope (IP 85102)

To verify compliance with 10 CFR Part 70, the inspector reviewed:

- Semi-annual Material Status Reports (DOE/NRC Form 742) from April 2000 to date

- Semi-annual Inventory Composition Reports (DOE/NRC Form 742C) from April 2000 to date
- Semi-annual Nuclear Material Transaction Reports (DOE/NRC Form 741) from April 2000 to date
- Procedure AP-05, “SNM Inventory” Revision 3, dated December 22, 1995
- Health Physics Procedure RS-HP-SNM-1.0, “Special Nuclear Material Acquisition, Control, Receipt, Movement, and Inventory Reporting” Revision 2, dated January 4, 2000

b. Observations and Findings

Material Status Reports, Inventory Composition Reports, and Nuclear Material Transaction Reports had been completed semiannually and submitted by the licensee to the appropriate regulatory agencies in a timely manner and as required by 10 CFR 74.13(1).

In 2001, the responsibility for filing SNM reports was assumed by the Office of Radiation Safety Director. He issued corrections to the 2001 reports and implemented the new material codes starting with the report filed on April 16, 2002. The procedures for completing the reports require updating to incorporate the changes as discussed in Section 3 Procedures above.

c. Conclusion

The licensee was acceptably controlling and tracking SNM as required by 10 CFR Part 70.

11. Exit Interview

The inspection scope and results were summarized on April 18, 2003, with licensee representatives. The inspector discussed the findings for each area reviewed. The licensee acknowledged the findings and did not identify as proprietary any of the material provided to or reviewed by the inspector during the inspection.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

R. Anderson, Health Physicist, Assistant Radiation Safety Officer
W. Benedetti, Health Physics Technician
A. Fentiman, Chair, Nuclear Engineering Program
A. Kauffman, Associate Director, Nuclear Reactor Laboratory
R. Myser, consultant Ex-Associate Director
R. Peterson, Director, Office of Radiation Safety, Radiation Safety Officer
J. Talnagi, Senior Reactor Operator

INSPECTION PROCEDURE USED

IP 69001	Class II Non-Power Reactors
IP 81431	Fixed Site Physical Protection of Special Nuclear Material of Low Strategic Significance
IP 85102	Material Control and Accounting - Reactors

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

IFI 50-150/2003-201-01	Revise procedures AP-05 and RS-HP-SNM-1.0
IFI 50-150/2003-201-02	Review environmental dosimetry program and the impact of the State agency radiation meter calibration activities.

Closed

50-150/2001-201-01	IFI	Follow-up on the licensee's completion of the biennial review and required updates of the facility procedures as required by TS.
50-150/2000-201-01	VIO	Improper shipping papers and package labeling occurred on 4 occasions.

LIST OF ACRONYMS USED

CFR	Code of Federal Regulations
IFI	Inspector Follow-up Item
IP	Inspection Procedure
LCO	Limiting Conditions for Operation
OSU	The Ohio State University
NVLAP	National Voluntary Laboratory Accreditation Program
NPR	Non-Power Reactor
NRC	Nuclear Regulatory Commission
NRL	Nuclear Reactor Laboratory
RO	Reactor operator
ROC	Reactor Operations Committee
RSS	Radiation Safety Section
SNM	Special Nuclear Material
SRO	Senior reactor operator
TLD	Thermoluminescent Dosimeter
TS	Technical Specifications