

November 21, 2006

Dr. T. Tehan, Director
Rhode Island Nuclear Science Center
Rhode Island Atomic Energy Commission
16 Reactor Road
Narragansett, RI 02882-1165

SUBJECT: NRC ROUTINE INSPECTION REPORT NO. 50-193/2006-204

Dear Dr. Tehan:

This letter refers to the inspection conducted on October 31 - November 2, 2006, at your Rhode Island Nuclear Science Center (RINSC) Research Reactor facility. The inspection included a review of activities authorized for your facility. The enclosed report presents the results of that inspection.

This inspection was an examination of activities conducted under your license as they relate to safety and compliance with the Commission's rules and regulations and with the conditions of your license. Within these areas, the inspection consisted of selected examination of procedures and representative records, observations of activities, 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 2.390 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 NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at (the Public Electronic Reading Room) <http://www.nrc.gov/reading-rm/adams.html>.

Should you have any questions concerning this inspection, please contact Mr. Kevin M. Witt at 301-415-4075.

Sincerely,

/RA/

Johnny Eads, Branch Chief
Research and Test Reactors Branch B
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

Docket No.: 50-193
License No.: R-95

Enclosure: NRC Inspection Report No. 50-193/2006-204
cc w/enclosures: Please see next page

Rhode Island Atomic Energy Commission

Docket No. 50-193

cc:

Dr. Stephen Mecca, Chairman
Rhode Island Atomic Energy Commission
Providence College
Department of Engineering - Physics Systems
River Avenue
Providence, RI 02859

Dr. Harry Knickle, Chairman
Nuclear and Radiation Safety Committee
University of Rhode Island
College of Engineering
102 Bliss Hall
Kingston, RI 02881

Mr. Charles McMahon
Supervisor, Radiation Control Specialist
Rhode Island Department of Health
Division of Occupational and
Radiological Health
3 Capitol Hill Cannon
Providence, RI 02808-5097

Test, Research, and Training
Reactor Newsletter
University of Florida
202 Nuclear Sciences Center
Gainesville, FL 32611

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OFFICIAL RECORD COPY

U. S. NUCLEAR REGULATORY COMMISSION
OFFICE OF NUCLEAR REACTOR REGULATION

Docket No: 50-193

License No: R-95

Report No: 50-193/2006-204

Licensee: Rhode Island Atomic Energy Commission

Facility: Rhode Island Nuclear Science Center

Location: Narragansett, Rhode Island

Date: October 31 - November 2, 2006

Inspector: Kevin M. Witt

Approved by: Johnny H. Eads, Jr., Branch Chief
Research and Test Reactors Branch B
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

EXECUTIVE SUMMARY

Rhode Island Nuclear Science Center Research Reactor
NRC Inspection Report No.: 50-193/2006-204

This primary focus of this routine, announced inspection was the on-site review of selected aspects of the licensee's two megawatt (2 MW) Class 1 research and test reactor programs concerning organization and staffing, review and audit and design control functions, procedures, operations, operator requalification, fuel movement and handling, maintenance and surveillance, emergency preparedness, and inspector follow-up items. The licensee's programs were found to be acceptably directed toward the protection of public health and safety and were in compliance with NRC requirements. No safety concerns or violations of regulatory requirements were identified.

Organization and Staffing

- The organization and staffing were consistent with Technical Specification requirements.

Review and Audit and Design Control Functions

- Review and oversight functions required by the Technical Specifications were acceptably completed by the Nuclear and Radiation Safety Committee.
- Based on the records reviewed, the inspector determined that the licensee's design change program was being implemented as required.

Procedures

- The procedural review, revision, and implementation program satisfied Technical Specification requirements.

Operations

- The operations program satisfied Technical Specification and procedural requirements.

Operator Requalification Program

- Operator training and requalification was being conducted in accordance with the Rhode Island Nuclear Science Center Operator Requalification Program.

Fuel Movement and Handling

- The fuel handling and examination program satisfied Technical Specification and licensee procedural requirements.

Maintenance and Surveillance

- The maintenance and surveillance program satisfied Technical Specification requirements.

Emergency Preparedness

- The emergency preparedness program was conducted in accordance with the approved Emergency Plan.

Inspector Follow-up Items

- The Inspector Follow-up Item regarding emergency preparedness updates was closed.

REPORT DETAILS

Summary of Plant Status

The licensee's 2 Megawatt [MW] Rhode Island Nuclear Science Center Reactor (RINSCR) has been operated in support of experiments, reactor operator training, and periodic equipment surveillances. During the inspection, the reactor was operated in support of on-going work.

1. Organization and Staffing

a. Inspection Scope (Inspection Procedure [IP] 69006)

The inspector reviewed the following to verify compliance with the staffing requirements in Technical Specification (TS) Sections 6.1, 6.2 and 6.3:

- staff qualifications and management responsibilities
- staffing requirements for the safe operation of the reactor
- selected portions of the operations logbooks for the past twelve months
- Rhode Island Nuclear Science Center (RINSC) organizational structure and staffing
- Rhode Island Atomic Energy Commission (RIAEC) meeting minutes, dated July 12 and April 4, 2006
- RINSC Operating Procedures, Section 1, "General Considerations," original version - not revised to date
- RINSC Annual Report for July 1, 2005 through June 30, 2006
- TS for the RINSC, Amendment No. 29, dated December 28, 2004

b. Observations and Findings

Through discussions with licensee representatives, the inspector determined that management responsibilities, as well as the organizational structure at the facility, had not changed since the last inspection in the area of operations (refer to NRC Inspection Report No. 50-193/2006-202). The inspector noted that the RIAEC meets on a frequent basis to discuss items of importance to operation and safety of the facility. All day to day coordination of facility operations is conducted by the facility director.

After discussing facility operations with licensee personnel, the inspector determined that there were three qualified Senior Reactor Operators (SROs) and one qualified Reactor Operator (RO) at the facility. One individual was in training to become a RO and another individual licensed as an RO was in training to become an SRO. The staffing at the facility was acceptable to support the ongoing activities. The organizational structure and staffing were as required by TS and as reported in the Annual Reports. Qualifications of the staff met TS requirements. The inspector verified, through a review of the various records mentioned above, that management and staff responsibilities were administered and fulfilled as required by TS and applicable procedures.

c. Conclusions

The organization and staffing were consistent with TS requirements.

2. Review and Audit and Design Control Functions

a. Inspection Scope (IP 69007)

In order to verify that the licensee had established and conducted reviews and audits as required in TS Sections 6.1 and 6.4, and to ensure that the licensee's change and design control program was being implemented as required in 10 CFR 50.59, the inspector reviewed selected aspects of:

- facility configuration documents
- proposed facility design changes for the past two years
- Operations Records Review form, latest revision dated October 10, 2006
- Nuclear and Radiation Safety Committee (NRSC) meeting minutes dated September 28 and December 13, 2005 and April 19 and August 2, 2006
- Nuclear and Radiation Safety Committee Draft meeting minutes dated October 30, 2006
- safety reviews and audits conducted by the committees and noted in the respective committee and subcommittee meetings minutes
- NRSC Charter, Rev. 0, dated November 14, 2005
- RINSC Annual Report for July 1, 2005 through June 30, 2006
- RINSC Operating Procedures, Section 1, "General Considerations," original version - not revised to date
- 10 CFR 50.59 Review of "Non-Operate" Indicator Light on Neutron Flux Monitor, dated January 10, 2006

b. Observations and Findings

(1) Review and Audit Functions

Minutes of the NRSC showed that the committee met at the required frequency and that a quorum was present. The topics considered during these meetings were consistent with TS requirements to provide direction and oversight, and to ensure acceptable use of the reactor. Meeting minutes indicated that one of the NRSC members retired and a new member was designated to fill the vacancy. The licensee has submitted a TS amendment request to the NRC to change the qualifications of the designated members. A similar request was submitted to the Rhode Island Department of Health, which subsequently approved the amendment request for the State of Rhode Island broadscope materials license. The licensee is planning on adding an additional member with experience in the field of nuclear engineering to the NRSC. The NRSC has approved this proposed change and the licensee is actively pursuing the addition of a new member.

There were two different types of meetings held throughout the year. A subcommittee of the NRSC met each quarter and conducted audits and reviews of specific portions of the operations and safety programs so that all aspects of the licensee's entire program was reviewed annually as required. The full NRSC met annually as required and reviewed the results of all audits. Problems or improvement items noted during these audits were discussed and corrective actions were taken as needed.

(2) Design Control Functions

Through review of applicable records and interviews with licensee personnel, the inspector determined that no changes requiring prior NRC approval had been initiated and/or completed at the facility within the last year. The inspector verified that any changes or modifications to the facility would be analyzed by the staff, presented to and reviewed by the NRSC, determined to be acceptable, and approved as required.

The inspector noted one particular situation that the licensee reviewed under the rules of 10 CFR 50.59. The inspector reviewed a situation where the licensee had noted the continuous illumination of the "non-operate" indicator light on the TS required neutron flux monitor. The licensee verified that all scrams and interlocks associated with the instrument were functioning properly. The licensee investigated the situation further and determined that the cause of the problem is a transistor in the electrical circuit of the instrument. The licensee determined that further operations may be resumed despite the non-operate indication on the neutron flux monitor. The NRSC reviewed the situation and supported the staff decision.

A review of the design change packages demonstrated that they had been acceptably documented in accordance with 10 CFR 50.59 and applicable licensee requirements. In addition, the changes were reviewed and approved by the NRSC as required. None of the changes reviewed were found to increase the probability or consequence of an accident, create the possibility of a different type of accident, adversely affect the safety margin, or require a change to the facility TS.

The inspector also reviewed another situation of concern to the facility staff. The situation involves the response of the reactor power level indicating channels. When an experimental facility is inserted into the core in the vicinity of the power channels, the licensee notes that the experiment causes a change to the indication of power level. The change in power level indication can be severe enough to limit the power level to 60% of the maximum allowable power. The licensee plans to conduct a study to determine the possible solutions to the alteration of the power levels. One of the ideas the licensee plans to implement is to create a procedure allowing for the alteration of the power channel

calibration settings to allow power levels to properly indicate the true thermal power level of the reactor core.

c. Conclusions

Review and oversight functions required by the TSs were acceptably completed by the NRSC. Based on the records reviewed, the inspector determined that the licensee's design change program was being implemented as required.

3. Procedures

a. Inspection Scope (IP 69008)

To verify that facility procedures were being reviewed, revised, and implemented as required by TS Section 6.5, the inspector reviewed selected aspects of:

- procedural review, revision, implementation, and compliance
- RINSC Operating Procedures, Appendix AD, "Reactor Power Changes," Rev. 0, dated June 8, 2006
- Nuclear and Radiation Safety Committee meeting minutes dated September 28 and December 13, 2005 and April 19 and August 2, 2006
- Nuclear and Radiation Safety Committee Draft meeting minutes dated October 30, 2006

b. Observations and Findings

Procedures had been formulated for the safe, routine operation of the reactor. Records showed that procedures for potential malfunctions (e.g., radioactive releases and contaminations, and abnormal events) had also been developed and were available to be implemented as required. The inspector noted that procedural changes were being reviewed and approved by the NRSC as required by TS. Training of personnel on procedures and changes was acceptable. Through observation of various activities at the facility, including reactor operation and sample handling, the inspector determined that licensee personnel conducted activities in accordance with applicable procedures.

Review of NRSC meeting minutes and discussions with the licensee indicated the request and approval of several new procedures since the previous inspection. One of the procedures that the inspector reviewed pertains to the startup, operation, and shutdown of the reactor. The new revision of the procedure changes the format to a more user friendly format and specific changes were made to apply to new instrumentation. The inspector noted that the new procedure lays out an effective method of ensuring the operations of the reactor are carried out in a safe manner. The licensee plans on continuing to change existing procedures to a new format to improve the functionality of the procedures.

c. Conclusions

The procedural review, revision, and implementation program satisfied TS requirements.

4. Operations

a. Inspection Scope (IP 69006)

The inspector reviewed selected aspects of the following to ensure that the operations program was being implemented as required in TS Sections 3, 4, and 6:

- staffing for reactor operations
- RINSC Operations Log Books No. 54, dated from December 6, 2005 to present
- Operating Data Notebooks for 2004 and 2005
- RINSC Operating Procedures, Section 8, "Operations at Power and Adjustments in Power Level," latest revision dated January 26, 1995
- RINSC Operating Procedures, Section 9, "Shutdown," latest revision dated October 6, 1999
- RINSC Operating Procedures, Appendix AD, "Reactor Power Changes," Rev. 0, dated June 8, 2006
- RINSC Operating Procedures, Appendix V, "RINSC Pre-Startup Check Sheet," Rev. 9, dated January 19, 2006
- Form NSC-1, "Pre-Startup Check Sheet," Rev. 9, dated January 19, 2006
- Form NSC-1.c, "Shutdown Check Sheet," Rev. 0, dated June 8, 2006
- Form NSC-11, "Shift Record Data Sheet," Rev. 0, dated June 8, 2006
- Form NSC-15, "RINSC Checklist for Securing Reactor Facility," Rev. 1, dated October 24, 2003
- Form NSC-18, "RINSC Reactor Operations Data," Rev. 0, dated June 8, 2006
- Completed NSC-1 forms, dated from January 3, 2006 to present
- Completed NSC-1.c forms, dated from January 3, 2006 to present
- Completed NSC-11 forms, dated from January 3, 2006 to present
- Completed NSC-18 forms, dated from January 3, 2006 to present

b. Observations and Findings

The operating logs and records from December 2005 through the present were reviewed. The inspector determined that these documents provided an acceptable indication that operational activities were being conducted as required by TS and procedures. This included documentation of events, surveillance activities, and problems at the facility and tracking or resolution of the problems. These logs and records also indicated that shift staffing was as required by TS. The records further showed that those operational conditions and parameters logged were consistent with license and TS requirements.

The inspector conducted observations of the reactor staff operating the reactor on November 2, 2006, and reviewed the pre-startup checklist and the operating logs. The inspector noted that the licensed operator on duty was knowledgeable and competent. Observation of operational activities also confirmed that reactor operations were carried out in accordance with written procedures and TS requirements.

c. Conclusions

The operations program being implemented at the facility satisfied TS and procedural requirements.

5. Operator Requalification Program

a. Inspection Scope (IP 69003)

The inspector reviewed selected portions of the following to ensure that the Operator Requalification Program was being acceptably implemented:

- operator physical examination records
- qualified operator licenses and expiration dates
- RINSC Operations Log Books No. 54, dated from December 6, 2005 to present
- RINSC Operating Procedures, Appendix U, "Reactor Operator Re-qualification," Rev. 2, approved June 29, 2005
- Form NSC-45, "Operator Requalification Program Checklist" - associated with RINSC Operating Procedures, Appendix U
- Form entitled "The Rhode Island Nuclear Science Center Research Reactor Operator Requalification Exam" - associated with RINSC Operating Procedures, Appendix U
- Summary sheet entitled "Operator Requalification Exam" - associated with RINSC Operating Procedures, Appendix U

b. Observations and Findings

The Requalification Program was outlined in the RINSC Operating Procedures, Appendix U, Rev. 1, which is the same version as the Requalification Program approved by the NRC. As noted above, there were three qualified SROs and one qualified RO at the facility. Through reviewing requalification check sheets and examination records, the inspector found that all operators' licenses were current and that the program was being maintained up-to-date. The RO and SROs were completing the required activities and/or reactivity manipulations to maintain their licenses current and their active duty status. These activities also included completing the required training and the required number of hours of SRO functions, as applicable. Records showed that annual operating tests and biennial written examinations were being completed by the qualified operators as stipulated in the program. The inspector also verified that physical examinations

for operators were completed biennially as required by the requalification program.

c. Conclusions

Operator training and requalification was being conducted in accordance with the RINSC Operator Requalification Program.

6. Fuel Movement and Handling

a. Inspection Scope (IP 69009)

The inspector reviewed selected aspects of the following to verify compliance with TS Sections 3.9 and 4.9:

- fuel examination records
- fuel handling equipment and instrumentation
- RINSC Operations Log Books No. 54, dated from December 6, 2005 to present
- RINSC Operating Procedures, Section 2, "Critical Experiments," original version - not revised to date
- RINSC Operating Procedures, Section 3, "Reloading the Core to a Known Configuration," original version - not revised to date
- RINSC Operating Procedures, Section 5, "Moving and Positioning the Core," original version - not revised to date
- Form NSC-58, "RI Nuclear Science Center Core Reloading or Change" - associated with RINSC Operating Procedures, Section 5

b. Observations and Findings

Core loading procedures provided a prescribed method to move and handle fuel consistent with the requirements and provisions of the TS Sections 3.9 and 4.9 and the licensee safety analyses. Fuel movement and fuel examination records showed that the fuel of the current core, Core No. 3, was moved in accordance with procedures and examined as required. In accordance with a licensee request and the subsequent NRC review and approval, the licensee was inspecting one-fifth of their fuel elements every year so that all elements would be inspected every five years. The inspector verified that the one-fifth of the fuel was last inspected on August 8, 2006.

c. Conclusions

The fuel handling and examination program satisfied TS and licensee procedural requirements.

7. Maintenance and Surveillance

a. Inspection Scope (IPs 69006 and 69010)

The inspector reviewed selected aspects of the following to verify that the licensee's maintenance and surveillance program was being acceptably implemented as required by TS Sections 3 and 4:

- RINSC Reactor Data Notebook
- Operating Data Notebooks for 2004 and 2005
- RINSC Operations Log Books No. 54, dated from December 6, 2005 to present
- Periodic Maintenance Notebook containing the documentation of all maintenance scheduled for the facility
- RINSC Operating Procedures, Section 10, "Reactor Facility Emergency Systems Checkout Procedure," latest revision dated August 7, 1995
- RINSC Operating Procedures, Appendix A, "Confinement System Semi-Annual Surveillance," Rev. 0, approved November 20, 2001
- RINSC Operating Procedures, Appendix D, "Blade Speeds and Drop Times," Rev. 1, approved March 28, 2003
- RINSC Operating Procedures, Appendix I, "Primary Water Chemistry," Rev. 2, approved December 15, 2004
- RINSC Operating Procedures, Appendix N, "Primary Temperature Channel Calibration," Rev. 0, approved March 26, 2004
- RINSC Operating Procedures, Appendix W, "Alarm, Scram, and Interlock Checks," Rev. 5, approved August 2, 2006
- RINSC Operating Procedures, Appendix X, "Monthly Maintenance," Rev. 4, approved December 15, 2004
- Form NSC-1a, "Alarm, Scram, and Interlock Check Sheet" - associated with RINSC Operating Procedures, Appendix W
- Form NSC-1b, "Monthly Maintenance Check Sheet" - associated with RINSC Operating Procedures, Appendix X
- Form NSC-3b, "Primary Water Chemistry" - associated with RINSC Operating Procedures, Appendix I
- Form NSC-3d, "Weekly Gross Radioactivity Record for Primary Water" - associated with RINSC Operating Procedures, Appendix I
- Form NSC-4f, "Duty Tech Task List Daily/Weekly," latest revision dated July 16, 2001
- Form NSC-4g, "Duty Tech Annual Task," latest revision dated July 16, 2001
- Form NSC-14a, "RINSC Standby Power System Check List," latest revision dated April 19, 2006
- Form NSC-14b, "Evacuation System Check List," latest revision dated March 18, 1996 - associated with RINSC Operating Procedures, Section 10
- Form NSC-43, "Control Blade Parameter Sheet," - associated with RINSC Operating Procedures, Appendix D, as Attachment B

- Form NSC-44, "RINSC Emergency Generator Maintenance Checklist," Rev. dated September 1995
- Form entitled, "Confinement System Surveillance" - associated with RINSC Operating Procedures, Appendix A

b. Observations and Findings

(1) Maintenance Activities

Records reviewed for the time period from December 2005 to date indicated that corrective maintenance activities were conducted and problems were addressed as required by the applicable RINSC Operating Procedures and appendices listed above. The records also showed that routine maintenance activities were conducted at the required frequency and in accordance with the applicable Appendix or equipment manual. Maintenance activities ensured that equipment remained consistent with the Safety Analysis Report and TS requirements.

(2) Surveillance Activities

Surveillances, tests, and limiting conditions for operation (LCO) verifications for selected systems or components were reviewed and found to be completed on schedule and in accordance with the TS and procedures. All the recorded results reviewed by the inspector were within the prescribed parameters. Associated records and logs referenced above were complete and were being maintained as required.

The inspector reviewed the procedure for completing monthly checks and the associated records of completion. During review of the records, the inspector noted that the items on the list were not actually being checked on a monthly basis. This purpose of this procedure is to ensure the extraneous items that are related to the function of auxiliary items support the safety of the reactor facility. The discussion section of Procedural Appendix X states, "These steps should be performed monthly." The inspector noted that the last time the steps were completed was January 27, 2006. The licensee stated that there is no requirement for completion of this procedure and most of these items are checked by completing other routine tasks around the facility. The General Considerations Procedure states in Section 1.34, "All operations shall be in accordance with these procedures." The inspector communicated to the licensee the importance of ensuring that all procedures are followed as written. This issue will be considered by the NRC as an Inspector Follow-up Item (IFI) and will be reviewed during the next inspection at the facility (IFI 50-193/2006-204-01).

c. Conclusions

The maintenance and surveillance program satisfied TS requirements.

8. Emergency Preparedness

a. Inspection Scope (IP 69011)

To verify that the licensee was implementing and complying with the Emergency Plan (E-Plan) requirements and Section 6.1 of the TS, the inspector reviewed selected aspects of:

- emergency response supplies, equipment and instrumentation
- training records for emergency response personnel
- offsite support and support agreements
- synopses and critiques of table top emergency exercise and evacuation drill for 2006
- RINSC E-Plan, Rev. 1, dated March 2001
- Emergency Plan Implementing Procedures, Rev. 4, dated November 2004
- RINSC Operating Procedures, Section 10, "Reactor Facility Emergency Systems Checkout Procedure," latest revision dated August 7, 1995
- RINSC Operating Procedures, Appendix AC, "Abnormal Procedures," Rev. 0, approved June 17, 2004
- Form NSC-14a, "RINSC Standby Power System Check List," latest revision dated August 7, 1995 - associated with RINSC Operating Procedures, Section 10
- Form NSC-14b, "Evacuation System Check List," latest revision dated March 18, 1996 - associated with RINSC Operating Procedures, Section 10
- Form NSC-83, "Emergency Cabinet Inventory List"
- Letter of Agreement (LOA) between Narragansett Police Department and RINSC, dated December 21, 2005
- LOA between City of Narragansett Fire Department (NFD) and RINSC, dated December 1, 2005
- LOA between Rhode Island Hospital and RINSC, dated January 10, 2006
- RINSC Emergency Contact List, dated July 1, 2006

b. Observations and Findings

The E-Plan in use at the RINSCR was verified to be the same as the version most recently approved by the NRC. The E-Plan was audited and reviewed annually as required. E-Plan Implementing Procedures (EIPs) were also reviewed and revised as needed to effectively execute the E-Plan. The inspector verified that a list of emergency personnel, management, and offsite agencies was posted in the Control Room as required by TS Section 6.1. An Emergency Call list was also verified to be available at the local NFD Station.

Supplies, instrumentation, and equipment maintained at the facility and at the Emergency Support Center located in the Coastal Institute Building, were being controlled and inventoried as required in the E-Plan. This included inspections and testing of the fire extinguishers and the fire suppression system at the

facility. LOAs with offsite response organizations and support groups had been updated biennially and maintained as required. Communications capabilities with these support groups were acceptable and had been tested as required. While at the facility, the inspector observed a weekly test of the emergency evacuation alarm system. The inspector verified that the system is functioning properly.

The documentation of the drills conducted during the past year was reviewed. Emergency preparedness and response training was being completed typically just prior to the drills. Through drill scenario and record reviews, emergency responders were determined to be knowledgeable of the proper actions to take in case of an emergency. Emergency drills had been conducted annually as required by the E-Plan. Critiques were written following the drills to document the strengths and weaknesses identified during the exercise. Action items were developed to correct the problems identified.

The inspector visited Station #3 of the NFD. The inspector's visit to the NFD Station was unannounced. The inspector determined that there were adequate supplies and equipment available at the NFD to handle a fire emergency at the facility. Through talking with the NFD Lieutenant and Private, the inspector noted that NFD personnel had attended training for orienting the first responders with the hazards of the facility. The personnel at the NFD appeared confident to support any emergency response support the facility requests. There appeared to be a good working relationship between the licensee and this support group.

c. Conclusions

The emergency preparedness program was conducted in accordance with the approved E-Plan.

9. Follow-up on Previous Open Items

a. Inspection Scope (IP 92701)

The inspector reviewed the actions taken by the licensee following identification of one IFI during a previous inspection.

b. Observation and Findings

- (1) IFI 50-193/2005-203-01 - Follow-up with the licensee to ensure that the EIPs and the Emergency Communications Test List were updated, that health physics training for Narragansett Fire Department personnel was conducted, and that the South County Hospital was contacted to verify support in case of emergency.

NRC Inspection Report No. 50-293/2005-203, dated December 8, 2005, addressed the situation. During that inspection, the inspector noted that emergency drills had been conducted annually as required by the E-Plan.

Critiques were written following the drills to document the strengths and weaknesses identified during the exercise. Action items were developed to correct the problems identified. As a result of the annual drill held in July 2005, three action items had been identified. These included updating the EIPs and the Emergency Communications Test List, providing radiation protection training for NFD and Emergency Medical Technician personnel, and contacting the South County Hospital to verify support in case of emergency.

During this inspection, the inspector determined that the licensee had updated the EIPs and the Emergency Communications Test List and provided radiation protection training for NFD and Emergency Medical Technician personnel. However, the licensee has not contacted the South County Hospital to verify support in case of emergency. The licensee stated that verified support with the South County Hospital is not an issue, since this is not the primary support facility and the hospital will only accept non-contaminated individuals. The licensee stated that the hospital is obligated to treat any injury from the street, therefore, communication with the hospital is not necessary. This issue is considered closed.

c. Conclusions

The IFI regarding emergency preparedness updates was closed.

11. Exit Interview

The inspection scope and results were summarized on November 2, 2006, with members of licensee management. The inspector described the areas inspected and discussed in detail the inspection findings. No dissenting comments were received from the licensee.

PARTIAL LIST OF PERSONS CONTACTED

Licensee Personnel

H. Bicehouse, Radiation Protection Officer and Assistant Director for Reactor Safety
J. Davis, Reactor Supervisor
M. Damato, Health Physics Technician and Reactor Operator Trainee
D. Johnson, Health Physicist
B. MacGregor, Reactor Operator and Facility Engineer
M. Middleton, Assistant Director for Reactor Operations
T. Tehan, Director, Rhode Island Nuclear Science Center

Other Personnel

S. McLaughlin, Private, Narragansett Fire Department
D. Sluza, Lieutenant, Narragansett Fire Department

INSPECTION PROCEDURES USED

| | |
|----------|--|
| IP 69003 | Class 1 Research and Test Reactor Operator Licenses, Requalification, and Medical Activities |
| IP 69006 | Class 1 Research and Test Reactors Organization, Operations, and Maintenance Activities |
| IP 69007 | Class 1 Research and Test Reactors Review and Audit and Design Change Functions |
| IP 69008 | Class 1 Research and Test Reactor Procedures |
| IP 69009 | Class 1 Research and Test Reactors Fuel Movement |
| IP 69010 | Class 1 Research and Test Reactors Surveillance |
| IP 69011 | Class 1 Research and Test Reactors Emergency Preparedness |
| IP 92701 | Followup |

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

| | | |
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| 50-193/2006-204-01 | IFI | Follow-up with the licensee to ensure that all procedures are followed as written, specifically Procedural Appendix X, "Monthly Maintenance," which has not been completed in several months. |
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Closed

| | | |
|--------------------|-----|--|
| 50-193/2005-203-01 | IFI | Follow-up with the licensee to ensure that the EIPs and the Emergency Communications Test List were updated, that health physics training for Narragansett Fire Department personnel was conducted, and that the South County Hospital was contacted to verify support in case of emergency. |
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LIST OF ACRONYMS USED

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|--------|---|
| ADAMS | Agencywide Documents Access and Management System |
| CFR | Code of Federal Regulations |
| E-Plan | Emergency Plan |
| EPIP | Emergency Plan Implementing Procedures |
| IFI | Inspector Follow-up Item |
| IP | Inspection Procedure |
| LCO | Limiting Conditions for Operation |
| LOA | Letter of Agreement |
| MW | Megawatt |
| NFD | City of Narragansett Fire Department |
| No. | Number |
| NRC | Nuclear Regulatory Commission |
| NRSC | Nuclear and Radiation Safety Committee |
| NSC | Nuclear Science Center |
| Rev. | Revision |
| RIAEC | Rhode Island Atomic Energy Commission |
| RINSC | Rhode Island Nuclear Science Center |
| RINSCR | Rhode Island Nuclear Science Center Reactor |
| RO | Reactor Operator |
| SRO | Senior Reactor Operator |
| TS | Technical Specification |