

October 16, 2015

Dr. Cameron Goodwin, Director
Rhode Island Nuclear Science Center
16 Reactor Road
Narragansett, RI 02882-1165

SUBJECT: RHODE ISLAND ATOMIC ENERGY COMMISSION – NRC ROUTINE
INSPECTION REPORT NO. 50-193/2015-202

The U.S. Nuclear Regulatory Commission (NRC or the Commission) conducted an inspection from September 8–10, 2015, at the Rhode Island Nuclear Science Center Reactor facility (Inspection Report No. 50-193/2015-202). The enclosed report documents the inspection results which were discussed on September 10, 2015, with you, Mr. Jeff Davis, the Assistant Director, and other members of your staff. Another discussion was held via telephone with you and members of your staff on September 17, 2015, to discuss the preliminary results of your review of the scram event which occurred on November 10, 2014.

This inspection examined 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. The inspector observed various activities in progress, interviewed personnel, and reviewed selected procedures and representative records. Based on the results of this inspection, no findings of noncompliance of requirements were identified. No response to this letter is required.

In accordance with Title 10 of the *Code of Federal Regulations*, Section 2.390, "Public inspections, exemptions, and requests for withholding," a copy of this letter, its enclosure, and your response (if any) will be available electronically for public inspection in the NRC Public Document Room or from the NRC's document system (Agencywide Documents Access and Management System (ADAMS)). ADAMS is accessible from the NRC Web site at <http://www.nrc.gov/reading-rm/adams.html> (the Public Electronic Reading Room).

C. Goodwin

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Should you have any questions concerning this inspection, please contact Mr. Craig Bassett at 301-466-4495 or by electronic mail at Craig.Bassett@nrc.gov.

Sincerely,

/RA/

Kevin Hsueh, Chief
Research and Test Reactors Oversight Branch
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

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

Enclosure:
NRC Inspection Report No. 50-193/2015-202

cc: See next page

cc:

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

C. Goodwin

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DATE	10/15/2015	10/16/2015

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

Docket No. 50-193

License No. R-95

Report No. 50-193/2015-202

Licensee: Rhode Island Atomic Energy Commission

Facility: Rhode Island Nuclear Science Center Research Reactor

Location: Narragansett, Rhode Island

Dates: September 8–10, 2015

Inspector: Craig Bassett

Approved by: Kevin Hsueh, Chief
Research and Test Reactors Oversight Branch
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

Enclosure

EXECUTIVE SUMMARY

Rhode Island Atomic Energy Commission
Rhode Island Nuclear Science Center Reactor Facility
NRC Inspection Report No. 50-193/2015-202

The primary focus of this routine, announced operations inspection was the onsite review of selected aspects of the Rhode Island Atomic Energy Commission (the licensee's) two megawatt Class I research reactor safety program including: (1) organizational structure and staffing, (2) review and audit and design change functions, (3) reactor operations, (4) operator requalification, (5) maintenance and surveillance, (6) fuel handling, (7) experiments, (8) procedures, and (9) emergency Preparedness. The review covered the period of time from the last U.S. Nuclear Regulatory Commission (NRC) inspection of these areas to the present. The licensee's program was acceptably directed toward the protection of public health and safety and in compliance with the NRC requirements.

Organizational Structure and Staffing

- The organization structure appeared to be in compliance with Technical Specifications requirements.
- The present staffing level appeared to be adequate for current conditions.

Review and Audit and Design Change Functions

- The Nuclear and Radiation Safety Committee was meeting as required and reviewing the topics outlined in the Technical Specifications. Audits were being completed as required.
- Facility modifications and procedure changes were being evaluated in accordance with the requirements specified in Title 10 of the *Code of Federal Regulations* Section 50.59.

Reactor Operations

- Reactor operations were conducted in accordance with the applicable procedures and were acceptable.

Operator Requalification

- Operator requalification was being completed as required by the licensee's Operator Requalification Program and the program was being maintained up-to-date.
- Operators were receiving their biennial physical examinations as required.

Maintenance and Surveillance

- The program established and implemented by the licensee was being used to effectively complete maintenance activities at the facility.

- The surveillance program currently in use by the licensee satisfied Technical Specifications requirements.

Fuel Handling

- Fuel movements were conducted in accordance with Technical Specifications and procedural requirements.
- Fuel inspections were being completed annually as required.

Experiments

- The program for reviewing, authorizing, and conducting experiments satisfied Technical Specifications and procedural requirements.

Procedures

- The procedural review, revision, and implementation program satisfied the requirements of Technical Specifications Section 6.5, "Operating Procedures."

Emergency Preparedness

- The licensee maintained an effective emergency preparedness program through implementation of the Emergency Plan and the associated implementing procedures.

REPORT DETAILS

Summary of Facility Status

The Rhode Island Atomic Energy Commission's (RIAEC or the licensee) Rhode Island Nuclear Science Center (RINSC) two megawatt Class I research reactor continued to be operated in support of research, service, education, training, and surveillance. During the inspection, the reactor was operated to irradiate samples and for a tour.

1. Organizational Structure and Staffing

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

The inspector reviewed the following regarding the licensee's organization and staffing to ensure that the requirements of Sections 6.1 - 6.3 of the RINSC Technical Specifications (TS), Amendment No. 30, dated December 19, 2013, were being met:

- RINSC organizational structure and staffing
- Reactor Logbooks – Numbers (Nos.) 60 and 61
- Listing of the members of the Rhode Island Atomic Energy Commission
- Listing of the members of the RINSC Nuclear and Radiation Safety Committee

b. Observations and Findings

The inspector reviewed the facility organization and staffing. The organization had not changed since the previous inspection and continued to be staffed as required. It was noted that the licensee had hired two individuals to fill the vacant positions of Principle Reactor Operator and Facility Engineer. It was also noted that the Nuclear and Radiation Safety Committee (NRSC) consisted of the appropriate individuals required by the TS. The organizational structure at the facility appeared to be in compliance with the TS.

The Director continued to have responsibility for all activities in the facility as stipulated in the TS. Also, a licensed Senior Reactor Operator was assigned each shift with the responsibility for all activities during that shift. The inspector verified that shift staffing met TS requirements.

In addition, it was noted that most staff members had collateral duties to perform at the facility. Despite this fact, the inspector concluded that staffing appeared to be adequate given the current level of operation at the facility. An increase in the workload would necessitate a larger staff.

c. Conclusion

The organizational structure appeared to be in compliance with TS requirements. The present staffing level appeared to be adequate for current conditions.

2. Review and Audit and Design Change Functions

a. Inspection Scope (IP 69007)

The inspector reviewed selected aspects of the following with respect to the review and audit program and design change activities to ensure compliance with TS Section 6.4, entitled "Review and Audit":

- Nuclear and Radiation Safety Committee (NRSC) Charter, Revision (Rev.) 3, approval dated November 15, 2013
- NRSC meeting minutes from November 2013 through the date of this inspection
- 50.59 screen/review forms for the latest proposed modifications or changes to the facility
- 50.59 screen/review forms pertaining to modifications or changes to facility procedures
- RINSC Operating Procedure AP-03, "Facility Modifications," Rev. 1, NRSC approval dated November 2013
- RINSC Annual Report for the period from July 1, 2012, through June 30, 2013, submitted to the NRC on August 29, 2013
- RINSC Annual Report for the period from July 1, 2013, through June 30, 2014, submitted to the NRC on August 28, 2014

b. Observations and Findings

(1) Review and Audit Functions

The inspector reviewed the NRSC meeting minutes and associated records from November 2013 through the present. The records showed that meetings were being held and safety reviews and audits were conducted by various members of the NRSC or other designated persons as required and at the required frequency. Topics of these reviews and audits were consistent with TS requirements to provide guidance, direction, and oversight for the facility, and acceptable use of the reactor.

(2) Design Change Functions

Through interviews with licensee personnel, the inspector determined that various changes had been proposed for implementation at the facility. However, none had progressed past the proposal stage and thus had not been submitted to the NRSC for review.

The inspector assessed the 10 CFR 50.59 review process used at the facility. It was noted that the licensee's procedure provided guidance concerning the review of facility modifications and changes to procedures using the 10 CFR 50.59 review and evaluation process. Also, a Screening Form was used to determine whether or not a full 50.59 review

and evaluation was required for any change being contemplated. The inspector noted that several facility procedures had recently been developed or revised but all the changes were minor in nature, i.e., had "screened out," and did not require a 50.59 review.

c. Conclusion

The NRSC was meeting as required and reviewing the topics outlined in the TS. Audits were being completed as required. Design changes were being evaluated in accordance with 10 CFR 50.59 requirements.

3. Reactor Operations

a. Inspection Scope (IP 69006)

The inspector reviewed selected portions of the following documents to verify that the licensee was operating the reactor and documenting activities in accordance with TS Sections 6.1 and 6.2 and procedural requirements:

- Reactor Logbooks Nos. 60 and 61
- Selected Pre-Startup Check Sheet (NSC-1) forms
- Selected Reactor Operations Request (NSC-49) forms
- Selected RINSC Reactor Operations Data (NSC-18) forms
- Selected Shift Record Data Sheet (NSC-11) forms
- Selected Shutdown Check Sheet (NSC-1C) forms
- RINSC Annual Report for the past two reporting periods
- Periodic Maintenance Notebook containing the documentation of maintenance items
- Various RINSC Operating Procedures including: OP-01, "Reactor Operation Request;" OP-02, "RINSC Pre-Start Checkout;" OP-03, "Reactor Power Changes;" and, OP-04, "Abnormal Procedures"

b. Observations and Findings

(1) Routine Operations

The inspector reviewed various forms of documentation that were required to be completed for reactor operations. The inspector also reviewed portions of the recent reactor logbooks to verify compliance with the staffing requirements of TS 6.1.2 and 6.1.3. The appropriate documentation was being completed and shift staffing was as required by the TS.

The inspector observed various activities involving the reactor including a pre-start checkout, a reactor start-up, reactor operation in support of sample irradiation and a tour, and the reactor shut-down. A senior reactor operator (SRO) and reactor operator (RO) were properly assigned

for those operations. Reactor operations were conducted in an appropriate manner and in accordance with procedure.

(2) Overpower Scram Event

The inspector reviewed a scram event reported by the licensee. According to the licensee's latest Annual Report, an overpower scram occurred on November 10, 2014. This apparently happened while a Senior Reactor Operator (SRO) was attempting to bring the idled cooling Loop No. 1 on line and switch over from using cooling Loop No. 2 to Loop No. 1. This was done to try to bring coolant temperature down because it was suspected that Loop No. 2 was not performing as it should. Initially the licensee theorized that once the cold water from Loop No. 1 was injected into the core, it had a large positive reactivity impact creating a rapid increase in power which resulted in an overpower automatic reactor scram (i.e., raised the power level to the trip set point of 115 percent).

During the exit meeting with the licensee, the inspector indicated that there appeared to be several unanswered questions concerning this event. During a subsequent Exit with the licensee on September 17, 2015, the licensee indicated that they had investigated the event further. They indicated that they had tried to re-create the coolant flow circumstances that existed on November 10, 2014. During their test, with the reactor shutdown but the pumps operating, they tried to swap from one cooling loop to another. Under those circumstances they got a low flow scram. Following that test, they concluded that the scram that occurred last November was a low flow scram and not an overpower scram. The licensee was informed that, because there were still various unanswered questions surrounding this event, the issue will be considered an Unresolved Item (URI) and will be reviewed during a subsequent inspection (URI 50-193/2015-202-01).

c. Conclusion

Reactor operations were generally conducted in accordance with the applicable procedures and were acceptable. One Unresolved Item was opened concerning the reactor scram that occurred on November 10, 2014.

4. Operator Requalification

a. Inspection Scope (IP 69003)

The inspector reviewed selected aspects of the following to ensure compliance with the licensee's operator requalification program outlined in RINSC Operating Procedure AP-02, "Reactor Operator Requalification," Rev. 3, NRSC approval dated November 2013:

- Reactor Logbooks Nos. 60 and 61
- Individual reactor operator (RO) and SRO requalification files containing copies of the following:
 - Operator Requalification Program Checklist forms
 - Annual Operational Requalification Exam forms
 - Biennial Operator Requalification Examinations
 - Letters from the NRC to the licensed operators documenting the issuance of an RO or SRO license
- Copies for each individuals' NRC Form 396, "Certification of Medical Examination by Facility Licensee"
- American National Standards Institute/American Nuclear Society 15.4-2007, "Selection and Training of Personnel for Research Reactors," Section 7, "Medical Certification and Monitoring of Certified Personnel"

b. Observations and Findings

There were three licensed SROs and one RO on staff at the facility. The licenses of these operators were reviewed and determined to be current. It was noted that one person was in training and it was anticipated that he would take an NRC license examination in early 2016.

A review of the logs and records showed that training was being conducted in accordance with the licensee's requalification and training program. Procedure reviews and examinations had been documented as required. Information regarding facility changes and other relevant information had been routed to all licensed operators who then acknowledged their review of this information.

The inspector verified that quarterly reactor operations, reactivity manipulations, other required operations activities, and Reactor Supervisor activities were being completed as required and the appropriate records were being maintained. Records indicating the successful completion of the annual operations tests and supervisory observations were also maintained. Biennial written exams were also being administered to the qualified operators as well.

The inspector also noted that all operators were receiving biennial medical examinations within the allowed time frame as required. The inspector determined that the program was being maintained up-to-date. No problems or anomalies were noted.

c. Conclusion

Operator training and requalification was being conducted in accordance with the licensee's Operator Requalification Program. Operators were receiving their biennial physical examinations as required.

5. Maintenance and Surveillance

a. Inspection Scope (IP 69006, 69010)

The inspector reviewed the following to verify compliance with TS Section 3.0, "Limiting Conditions for Operation," and to determine if the periodic surveillance tests on safety systems were performed as stipulated in TS Section 4.0, "Surveillance Requirements":

- RINSC Maintenance Board for 2015 (spreadsheet)
- Reactor Data Notebook and associated documents
- RINSC Annual Report for the past two reporting periods
- Confinement System Notebook and associated documents
- Primary Water Analysis Notebook and associated documents
- Secondary Water Analysis Notebook and associated documents
- Instrumentation Calibration Notebook and associated documents including:
 - Nuclear Instrument Calibration forms
 - Instrument Calibration of Area Monitor (NSC-46) forms
- Maintenance Notebook and associated documents including:
 - RINSC Emergency Generator Maintenance Checklist (NSC-44) forms
 - Alarm, Scram, and Interlock Check Sheet (NSC-1A) forms

b. Observations and Findings

(1) Maintenance

The inspector reviewed licensee's tracking mechanism for maintenance and surveillance activities. The inspector verified that these activities were completed in accordance with TS and licensee procedures, and that the results met procedural requirements.

The maintenance records indicated that problems were addressed and preventive maintenance operations completed as required by procedure. Records showed that routine maintenance activities were conducted at the required frequencies and in accordance with the TS and/or the applicable procedure.

(2) Surveillance

The inspector reviewed various surveillance records including nuclear instrumentation calibration forms, shim safety blade inspection forms, reactivity worth calculation forms, and alarm, scram, and interlock check sheets. The data recorded in the reactor logbooks and on the surveillance records indicated that the verifications and calibrations had generally been completed on schedule and in accordance with licensee procedures. The results reviewed by the inspector were noted to be

within the TS and procedurally-prescribed parameters. Maintenance and surveillance activities ensured that equipment remained consistent with the Safety Analysis Report and TS requirements.

c. Conclusion

The program for conducting maintenance and for completing surveillance activities was being carried out in accordance with TS and procedural requirements.

6. Fuel Handling

a. Inspection Scope (IP 69009)

The inspector reviewed the following to verify compliance with TS 4.9.b and 6.9.1.g, which require visual inspection of fuel elements every 5 years on a rotating basis and maintenance of records associated with fuel inventories and transfers, respectively:

- Reactor Logbooks Nos. 60 and 61
- Inspection Procedure IP-01, "Core Element Movement and Inspection," Rev. 1, NRSC approval dated October 2014
- Reactor Data Notebook; fuel element inspection sheet and 10 year forecast

b. Observations and Findings

The inspector reviewed the licensee's fuel handling process and verified that fuel was moved according to an established protocol and inspected in accordance with a specific inspection schedule. The inspector reviewed documentation of selected fuel movements and interviewed facility staff about the process. A specific plan for each series of fuel movements had been developed prior to the activity and was used for core refueling, core rearrangement, and performing inspections of fuel elements. It was noted that fuel inspections had been completed and that the inspection documents contained descriptions of fuel conditions, as well as any discolorations and markings.

The inspector also compared the location of fuel elements in the reactor core with the information maintained on the fuel status board in the control room and on the fuel movement sheets for the latest core, Low Enrichment Uranium (LEU) Core No. 6. No problems or anomalies were noted.

c. Conclusion

Fuel movements were conducted in accordance with written procedures that met TS requirements. Fuel inspections were being completed annually as required.

7. Experiments

a. Inspection Scope (IP 69005)

The inspector reviewed selected aspects of the following to verify that the licensee was in compliance with TS Sections 3.1, 3.8, 4.1, and 4.8:

- Reactor Logbooks Nos. 60 and 61
- 2014 Operating Data Notebook – Volume 1 of 1
- Experimental administrative controls and precautions
- Various RINSC Operating Procedures including: OP-01, “Reactor Operation Request;” OP-02, “RINSC Pre-Startup Checkout;” OP-03, “Reactor Power Changes;” XP-01, “Reactor Experiment Request;” XP-02, “Reactor Experiment Approval;” XP-03, “Rabbit Irradiations;” XP-04, “Incore Irradiations;” XP-10, “Dry Irradiation Facility Irradiations;” and, XP-12, “Gamma Tube Irradiations”

b. Observations and Findings

The majority of the experiments conducted at the facility were ones that have been in place for several years. However, since the last inspection in this area, two new experiments had been reviewed and approved and another was being developed. The experiments involved flux mapping the core and irradiation and activation of various materials including multi-vitamin tablets to determine product content consistency. The inspector verified that each of the experiment proposals included a discussion of the proposed experiment, as well as the hazards involved and the anticipated results. The experiments had been reviewed and approved by the reactor staff and were subsequently reviewed and approved by the NRSC as required.

The inspector verified that the appropriate irradiation request forms for the various operations were completed and approved as required. The inspector also noted that the experiments that had been conducted using approved methods and with the cognizance of the SRO on duty in accordance with TS and procedural requirements. The experiments were documented on the appropriate forms and in the operations log as required. Engineering and radiation protection controls were implemented as required to limit exposure of the workers handling the irradiated samples.

c. Conclusion

The program for reviewing, authorizing, and conducting experiments satisfied TS and procedural requirements.

8. Procedures

a. Inspection Scope (IP 69008)

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

- Reactor Logbooks Nos. 60 and 61
- RINSC Operating Procedure AP-03, "Facility Modifications," Rev. 1, NRSC approval dated November 2013
- RINSC Operating Procedure CP-02, "Primary Cooling Flow Channel Calibration," Rev. 0, NRSC approval dated June 2015
- RINSC Operating Procedure CP-04, "Alarm, Scram, and Interlock Checks," Rev. 9, NRSC approval dated June 2015
- RINSC Operating Procedure IP-03, "Reactor Pool and Frame Inspection," Rev. 0, NRSC approval dated December 2014
- RINSC Operating Procedure IP-04, "Beam Port and Through Port Inspection," Rev. 0, NRSC approval dated December 2014
- RINSC Operating Procedure IP-08, "Reactor Building Foundation Crack Inspection," Rev. 0, NRSC approval dated December 2014
- NRSC meeting minutes from November 2013 through the date of this inspection

b. Observations and Findings

Procedures had been developed 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. The inspector verified that substantive procedural changes, as well as all new procedures, were being screened in accordance with the licensee's 50.59 process. Following that, the procedures were reviewed and approved by the NRSC as required by TS.

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. Experimenter personnel also followed procedures as required.

c. Conclusion

The procedural review, revision, and implementation program satisfied TS Section 6.5 requirements.

9. Emergency Preparedness

a. Inspection Scope (IP 69011)

The inspector interviewed staff members, reviewed the following documents, and visited the support organization facility discussed below to verify compliance with regulatory requirements and the RINSC Emergency Plan, Rev. 4, NRSC approval dated June 24, 2013:

- Emergency Preparedness Notebook containing documentation of various activities including:
 - Fire Alarms Tests
 - Completion of annual Emergency Supply Inventories (NSC-83)
 - Emergency training and drills conducted during the past two years
 - Emergency Communication Tests conducted with various support agencies
- RINSC Emergency Procedure EP-01, "Emergency Plan Implementing Procedures," Rev. 2, dated July 29, 2013
- Letter of Agreement between Narragansett Police Department and RINSC, signed by Mr. M. J. Davis and by Chief Hoxie on December 30, 2013
- Letter of Agreement for Medical Services, from John B. Murphy MD, Vice President of Medical Affairs, Rhode Island Hospital, to Dr. C. Goodwin, RIAEC, dated June 25, 2014
- Letter of Agreement between Narragansett Fire Department and RINSC, signed by Mr. M. J. Davis and Chief S. Partington on January 7, 2014

b. Observation and Findings

The inspector reviewed the Emergency Plan in use at the reactor and verified that it was being reviewed and updated biennially as required. The inspector reviewed the associated implementing procedures as well, and noted that they were also reviewed biennially and revised as needed.

Through records review and interviews with staff personnel (e.g., emergency responders), the inspector determined that they were knowledgeable of the proper actions to take in case of an emergency. Training for these individuals was accomplished annually through evacuation and emergency drill participation. Training for support organization personnel was provided whenever those organizations were available and/or requested such training.

The documentation of the training and drills conducted during the past 2 years was reviewed. Through drill scenarios and records review, and personnel interviews, off-site emergency responders were determined to be knowledgeable of the appropriate actions to take when responding to an emergency at the RINSC facility. Emergency and evacuation drills had been conducted annually as required by the Emergency Plan. Critiques following each drill had been conducted as required and the results documented. Recommendations were made to correct any deficiencies noted during the drill.

The inspector verified that the letters of agreement that had been established between the RINSC facility and the Narragansett Police Department (NPD) and the Narragansett Fire Department (NFD) remained in effect. These agreements stipulated that police and fire personnel would respond during an emergency and would provide support for the facility. The inspector also verified that the agreement between the reactor facility and the Rhode Island Hospital remained in effect. That agreement indicated that the hospital would provide RINSC personnel with needed support in case of any event involving a medical emergency.

Communications capabilities with support groups were acceptable and the various items of equipment (e.g., telephones and the building public address system) were in use daily. Portable radios were also available for use as needed and were checked annually. Emergency call lists had been revised and updated as needed and were available in the control room and in various areas around the facility as required, as well as in the Emergency Support Center (ESC).

The inspector visited the facility ESC located in a separate building and observed the emergency supplies, instruments, and information maintained in the locker located there in accordance with the Emergency Plan. The licensee maintained records indicating that the emergency supplies were inventoried on an annual basis as part of the surveillance program required by the Emergency Plan.

The inspector, the facility Radiation Safety Officer, and the RINSC Facility Director visited the Narragansett Fire Department's Station Number 3 and met with two on duty NFD personnel who would respond to an emergency that might occur at RINSC. The fire fighting and rescue vehicles in the station appeared to be well equipped and the personnel appeared to be trained to handle all types of emergencies. There was a good working relationship noted between the licensee and NFD personnel.

c. Conclusion

The licensee maintained an effective emergency preparedness program through implementation of the Emergency Plan and the associated implementing procedures.

10. Exit Interview

The inspector presented the inspection results to licensee management at the conclusion of the inspection on September 10, 2015. The inspector described the areas inspected and discussed in detail the inspection observations. The licensee acknowledged the findings presented and did not identify as proprietary any of the material provided to or reviewed by the inspector during the inspection. A second exit interview was held via telephone on September 17, 2015, to discuss the preliminary results of the licensee's review of the scram event which occurred on November 10, 2014.

PARTIAL LIST OF PERSONS CONTACTED

Licensee Personnel

C. Chichester	Chairman, Rhode Island Atomic Energy Commission
J. Davis	Assistant Director, Rhode Island Nuclear Science Center
C. Goodwin	Director, Rhode Island Nuclear Science Center
M. Marrapese	Principle Reactor Operator (in training)
P. Martin	Reactor Supervisor/Senior Reactor Operator
S. Nam	Radiation Safety Officer
B. Sirr	Facility Engineer

Other Personnel

R. Navakauskas	Captain, Narragansett Fire Department
J. Volpe	Lieutenant, Narragansett Fire Department

INSPECTION PROCEDURES USED

IP 69003	Class 1 Research and Test Reactor Operator Licenses, Requalification, and Medical Examinations
IP 69005	Class I Research and Test Reactor Experiments
IP 69006	Class 1 Research and Test Reactors Organization and Operations and Maintenance Activities
IP 69007	Class I Research and Test Reactor Review and Audit and Design Change Functions
IP 69008	Class I 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	Follow-up on Previously Identified Items

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

50-193/2015-202-01	URI	Review the licensee's actions to determine the cause of the reactor scram that occurred on November 10, 2014.
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Closed

None

LIST OF ACRONYMS USED

10 CFR	Title 10 of the <i>Code of Federal Regulations</i>
ADAMS	Agencywide Document Access Management System
EOC	Emergency Operations Center
ESC	Emergency Support Center
IP	Inspection Procedure
Nos.	Numbers
NRC	U.S. Nuclear Regulatory Commission
NRSC	Nuclear and Radiation Safety Committee
NSC	Nuclear Science Center
RIAEC	Rhode Island Atomic Energy Commission
RIEMA	Rhode Island Emergency Management Agency
RINSC	Rhode Island Nuclear Science Center
RO	Reactor Operator
SRO	Senior Reactor Operator
TS	Technical Specifications
URI	Unresolved Item