February 1, 2016

Dr. Steven Reese, Director
Radiation Center
Oregon State University
Radiation Center, A100
Corvallis, OR 97331-5903

SUBJECT: OREGON STATE UNIVERSITY – NUCLEAR REGULATORY COMMISSION ROUTINE INSPECTION REPORT NO. 50-243/2016-201

Dear Dr. Reese:

From January 11–13, 2016, the U.S. Nuclear Regulatory Commission (NRC or the Commission) conducted an inspection at the Oregon State University Radiation Center TRIGA Mark-II Research Reactor facility. The enclosed report documents the inspection results which were discussed on January 13, 2016, with you and members of your staff.

The 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 reviewed selected procedures and records, observed various activities, and interviewed personnel. Based on the results of this inspection, no findings of significance 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, 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).

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

Sincerely,

/RA/

Anthony J. Mendiola, Chief
Research and Test Reactors Oversight Branch
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

Docket No. 50-243
License No. R-106

Enclosure:
As stated

cc: See next page

cc:

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

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DATE	1/28/2016	1/28/2016	2/1/2016

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

Docket No:	50-243
License No:	R-106
Report No:	50-243/2016-201
Licensee:	Oregon State University
Facility:	TRIGA Mark-II Research Reactor Facility
Location:	Radiation Center Oregon State University Corvallis, Oregon
Dates:	January 11–13, 2016
Inspector:	Craig Bassett
Approved by:	Anthony J. Mendiola, Chief Research and Test Reactors Oversight Branch Division of Policy and Rulemaking Office of Nuclear Reactor Regulation

Enclosure

EXECUTIVE SUMMARY

Oregon State University
TRIGA Mark-II Research Reactor Facility
NRC Inspection Report No. 50-243/2016-201

The primary focus of this routine, announced inspection was the onsite review of selected aspects of the Oregon State University (the licensee's) 1.1 Megawatt Class II research reactor safety program, including: (1) organization and staffing, (2) review and audit functions and design change control, (3) reactor operations, (4) operator licenses, requalification, and medical activities (5) procedures, (6) maintenance and surveillance (7) fuel handling, (8) experiments, and (9) emergency preparedness since the last U.S. Nuclear Regulatory Commission (NRC) inspection of these areas. The licensee's program was acceptably directed toward the protection of public health and safety and in compliance with NRC requirements.

Organization and Staffing

- The licensee's organization and staffing were in compliance with the requirements specified in Technical Specifications (TSs) Section 6.

Review and Audit Functions and Design Change Control

- Review, audit, and oversight functions required by TSs Section 6.2, were acceptably completed by the Reactor Operations Committee (ROC).

- Modifications or changes to the facility procedures; experiments; and structures, systems, and components had undergone the required screenings and evaluations and had been reviewed and approved by the ROC.

Reactor Operations

- Reactor operations were conducted and documented in accordance with TSs and applicable procedural requirements and guidance.

Operator Licenses, Requalification, and Medical Activities

- Operator requalification was conducted as required and the program was up-to-date and being acceptably implemented.

- Medical examinations were being completed biennially for each operator as required.

Procedures

- Facility procedures were acceptable and procedure revisions were reviewed and approved in accordance with TSs Section 6.4.

- Procedural compliance was observed and found to be acceptable.

Maintenance and Surveillance

- Maintenance was being completed in accordance with TSs and procedural requirements.

- The program for surveillance verifications and calibrations was being implemented in accordance with TSs requirements.

Fuel Handling

- Fuel handling activities were conducted in accordance with facility procedures and fuel inspections were completed and documented as required by TSs Sections 4.1.e and 5.3.

Experiments

- The program for conducting and controlling experiments satisfied the requirements specified in the regulations and TSs Sections 3.8 and 4.8.

Emergency Preparedness

- Emergency response facilities and equipment were being maintained as required and responders were knowledgeable of proper actions to take in case of an emergency.

- The licensee maintained current emergency support agreements with offsite agencies to ensure that support would be available in case of an emergency.

- Annual drills were being held and documentation was maintained concerning the follow-up critiques and any needed corrective actions.

- Emergency preparedness training for staff and off-site personnel was being conducted as required.

REPORT DETAILS

Summary of Plant Status

Oregon State University (the licensee) continued to operate the 1.1 Megawatt TRIGA Mark-II research reactor in support of laboratory demonstrations, reactor surveillances, and sample irradiations. Observation of reactor operation and a review of applicable records indicated that the reactor was typically operated approximately 6 hours per day, 5 days per week. During this inspection, the reactor was started up and operated several hours per day at varying power levels for sample irradiation and engineering class laboratories.

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 Section 6, of the Technical Specifications (TSs), revised through Amendment No. 22 of the facility operating license, dated September 30, 2008, were being met:

- Oregon State University (OSU) Radiation Center and Oregon State TRIGA Reactor (OSTR) facility organizational structure and staffing
- Selected portions of the Reactor Console Logbooks for the past 2 years, which indicated staffing levels during routine reactor operations
- Oregon State University TRIGA Reactor Operating Procedure (OSTROP) 6, "Administrative and Personnel Procedures," Rev. Low Enriched Uranium (LEU) 2, reprinted August 2012, which outlined various administrative controls
- OSU Radiation Center and TRIGA Reactor Annual Report for the period from July 1, 2013, through June 30, 2014, submitted to the NRC on October 23, 2014
- OSU Radiation Center and TRIGA Reactor Annual Report for the period from July 1, 2014, through June 30, 2015, submitted to the NRC on October 9, 2015
- American National Standards Institute/American Nuclear Society (ANSI/ANS) 15.4-1988; R1999, "Selection and Training of Personnel for Research Reactors," dated 1999

b. Observations and Findings

The inspector noted that the Director of the Radiation Center continued to report to the President of the University through the Vice President for Research. It was also noted that the Radiation Center organizational structure and the responsibilities of the reactor staff were as outlined in TSs Section 6, and OSTROP 6 and had not changed since the last inspection.

Staffing levels remained consistent with those noted during the last inspection of this facility. The current reactor operations organization consisted of the Director of the Radiation Center, the Reactor Administrator, the Reactor Supervisor, a Reactor Engineer, and a Development Engineer. It was noted that these five individuals were qualified senior reactor operators (SROs). The staff also included four part-time reactor operators (ROs), who were students. This organization was as required and was consistent with that specified in the TSs.

The inspector reviewed the qualifications of the reactor staff. All personnel satisfied the training and experience requirements stated in ANSI/ANS 15.4, "Standard for the Selection and Training of Personnel for Research Reactors," as stipulated in the TSs. A review of the Reactor Console Logbooks and associated records confirmed that shift staffing met the minimum requirements for duty and on-call personnel.

c. Conclusion

Organizational structure and staffing were in compliance with the requirements specified in TSs Section 6.

2. Review and Audit Functions and Design Change Control

a. Inspection Scope (IP 69001)

In order to verify that the licensee had established and conducted reviews and audits as required by TSs Section 6.2, and to determine whether modifications to the facility had been reviewed in accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.59, "Changes, test, and experiments," the inspector reviewed:

- OSU 50.59 Screen Logbook
- OSU 50.59 Evaluation Logbook
- Design change functions outlined in OSTROP 6
- Reactor Operations Committee (ROC) meeting minutes from February 2014 to the present
- ROC Quarterly and Annual Audit and review records for the past 2 years
- Design Change records including screen reviews conducted under and documented in accordance with OSTROP 6, Figure 6.1 entitled, "Oregon State TRIGA Reactor (OSTR) 10 CFR 50.59 Screen Form," Nos. 14-01 through 14-06 and 15-01 through 15-11
- Design Change records including evaluations conducted under and documented in accordance with OSTROP 6, Figure 6.2 entitled, "OSU TRIGA Reactor (OSTR) 10 CFR 50.59 Evaluation Form," Nos. 15-01 through 15-04
- OSTROP 6, "Administrative and Personnel Procedures," Rev. LEU-2
- The two latest OSU Radiation Center and TRIGA Reactor Annual Reports

b. Observations and Findings

(1) Review and Audit Functions

The inspector reviewed the ROC meeting minutes from February 2014 to the present. These meeting minutes showed that the committee met quarterly and had considered the types of topics outlined by the TSs Section 6.2. Review of the committee meeting minutes also indicated that the ROC provided appropriate guidance and direction for reactor operations, and ensured suitable use and oversight of the reactor.

It was noted that ROC members completed quarterly audits of reactor operations and related records, as well as annual reviews of the reactor operator requalification, emergency preparedness, and security programs. The inspector noted that the audits and the resulting findings were acceptable and the audits were completed within the time frame stipulated by the TSs. During the review of the audits, the inspector noted that they were typically well documented except for the audits of the Reactor Operator Requalification program. The ROC minutes indicated that the audits had been performed but the documentation of the actual audits was not always present. The licensee was informed that this issue of proper documentation of audits will be considered an Inspector Follow-up Item (IFI) and will be reviewed during subsequent inspections (IFI 50-243/2016-201-01).

(2) Design Control

The inspector reviewed recent 10 CFR 50.59, screen and evaluation forms and interviewed licensee personnel concerning proposed changes to facility procedures; tests; experiments; and/or structures, systems, and components (SSCs). The inspector determined that screenings had been conducted as required. Some of these screenings mandated the completion of evaluations in accordance with the requirements of OSTROP 6. The screenings and evaluations had been documented as required, had been reviewed and approved by the ROC as needed, and had been signed off by the appropriate personnel. None of the evaluations were found to require a change to the TSs or a license amendment.

c. Conclusion

Review, audit, and oversight functions required by TSs Section 6.2 were acceptably completed by the ROC. Modifications or changes to the facility procedures, experiments, and SSCs had undergone the required screenings and evaluations and had been reviewed and approved by the ROC.

3. Reactor Operations

a. Inspection Scope (IP 69001)

To verify that the licensee was operating the reactor in accordance with TSs Sections 2 and 3 and the applicable procedures, the inspector reviewed selected portions and/or aspects of:

- Staffing during routine reactor operations
- Licensed Operator Time Log Sheets for the past 2 years
- Selected portions of the Reactor Supervisor's Log, Volume 15
- Selected OSU TRIGA Reactor Daily Power Log Sheets for the past 6 months
- Reactor operations documented in various Reactor Console Logbooks, Nos. 161–165
- Observation of startup, operations, and/or shutdown activities from January 11-13, 2016
- Start-up activities documented on selected OSTROP 2 forms entitled "OSU TRIGA Reactor Startup Checklist," from January through December 2015
- Shut down activities documented on selected OSTROP 3 forms entitled "Reactor Shutdown Checklists," from January through December 2015
- Selected records of console instrumentation readings documented on OSU TRIGA Reactor Daily Power Log Sheets for the past year
- Various OSTROP procedures including No. 2, 3, 4, 5, 25, and 27
- The two latest OSU Radiation Center and TRIGA Reactor Annual Reports

b. Observations and Findings

The inspector conducted observations of the reactor staff from January 11-13, 2016, and reviewed Reactor Console Logbooks and associated records. The inspector noted that the licensed ROs were knowledgeable and competent. Observation of operational activities also confirmed that reactor operations, including start-ups, routine operations, and shutdowns, were carried out in accordance with written procedures and TSs requirements. Adherence to procedures was acceptable.

Through these direct observations and document reviews, the inspector also confirmed that shift staffing during reactor operation met the TSs requirements for duty and on-call personnel. The inspector noted that the logs were being maintained as required by procedure and the records and associated forms provided an acceptable indication of operational activities. The logs indicated that the recorded operational conditions were within the limits specified in the license and TSs. The Reactor Console Logbooks, as well as other associated records, also documented abnormal events that occurred and measures that had been taken to track and resolve the problems.

c. Conclusion

Reactor operations were completed and documented in accordance with TSs and procedural requirements.

4. Operator Licenses, Requalification, and Medical Activities

a. Inspection Scope (IP 69001)

The inspector reviewed the following in order to determine that operator training and requalification activities were conducted as required by the requalification program and that medical requirements were met:

- Effective dates of current operator licenses
- Reactor operators medical examination records for the past 3 years
- Operator training records documented in the Operator Requalification Manual
- TRIGA Reactor Operator Requalification Exam Results forms for 2013, 2014, and 2015
- Reactor operations documented in various Reactor Console Logbooks, Nos. 161–165
- "Requalification Program for Licensed Operators of the Oregon State TRIGA Reactor," Rev. 1, reprinted September 30, 2004
- Logs and records of the number of hours spent operating the reactor maintained in the Operator Time Log and associated manual
- Active duty status and OSTR Annual Requalification Operating Test results documented in the Operator Time Log and associated manual
- OSTROP 16, "Annual Surveillance and Maintenance Procedures," and related log sheets

b. Observations and Findings

At the time of the inspection, there were five qualified SROs and four ROs working at the facility. The inspector verified that all the operators' licenses were current. It was noted that one person was in training to become an operator.

A review of the logs and records showed that training had been conducted in the areas stipulated in the licensee's requalification and training program, such that all the material was covered within a 2 year period. It was noted that lectures had been given as stipulated, training reviews had been documented, and written examinations had been completed. An annual operating test had been conducted for each operator by the Reactor Supervisor as required by the program as well. It was also verified that each operator had completed the required number of hours of reactor operations each calendar quarter, as required. Records of these reactor manipulations, other operational activities, and/or Reactor Supervisor activities were being maintained, as were records of the annual operating tests. The program was up-to-date and training was

current. The inspector noted that appropriate remedial actions were taken in the event of exam failures.

In addition to the above, the inspector verified that medical examinations were being completed biennially for each operator as required, and that medical conditions that could impact an operator's ability to comply with license conditions were appropriately addressed by the licensee.

c. Conclusion

The requalification and training program was up-to-date and acceptably implemented and maintained.

5. Procedures

a. Inspection Scope (IP 69001)

To determine whether facility procedures were being audited annually and whether the procedures met the requirements outlined in TSs Section 6.4, the inspector reviewed:

- Selected operating procedures, including OSTROPs 1, 2, 3, 5, 6, 7, 8, 9, 11, 13, 14, 15, 16, 18, 22, 26, and 31
- Procedural reviews and updates documented in ROC meeting minutes.
- Design Change records including screen reviews conducted under and documented in accordance with OSTROP 6, Figure 6.1 entitled, "Oregon State TRIGA Reactor (OSTR) 10 CFR 50.59 Screen Form," Nos. 14-01 through 14-06 and 15-01 through 15-11
- Design Change records including evaluations conducted under and documented in accordance with OSTROP 6, Figure 6.2 entitled, "OSU TRIGA Reactor (OSTR) 10 CFR 50.59 Evaluation Form," Nos. 15-01 through 15-04

b. Observations and Findings

The licensee's procedures were found to be acceptable for the facility's current operating status and staffing level. It was noted that the procedures specified the responsibilities of the various members of the staff. The inspector determined that the procedures were being audited and reviewed annually by the ROC as required and revised as needed.

Changes to procedures were screened according to OSTROP 6. If the changes did not result in a change to the intent of the procedure, they were routed to all licensed SROs, the Senior Health Physicist, the Reactor Administrator, and the Director, who signed and dated the change indicating review and concurrence. Substantive changes to procedures, checklists, and forms were required to undergo a 10 CFR 50.59 evaluation. They were then presented to the ROC for review and approval as required by TSs.

The activities and operations observed by the inspector during this inspection were completed in accordance with the applicable procedures. These activities and operations included reactor startup and shut down, equipment checkouts, reactor operation, inserting a sample into the thermal column, and removal and handling of Antimony samples.

c. Conclusion

Facility procedures were being reviewed and audited annually as required by TSs Section 6, and procedure revisions were reviewed and approved by the ROC. Procedural compliance was acceptable.

6. Maintenance and Surveillance

a. Inspection Scope (IP 69001)

To determine that surveillance requirements and limiting conditions for operation (LCO) verifications were being completed as required by TSs Sections 3 and 4, and that maintenance activities were conducted when required, the inspector reviewed:

- Selected portions of the Reactor Supervisor's Log, Volume 15
- Reactor operations documented in various Reactor Console Logbooks, Nos. 161–165
- Selected surveillance and calibration test data sheets and records maintained in the Surveillance and Maintenance Records Notebook
- Selected OSTROP procedures including Nos. 8, 9, 12, 13, 14, 15, 16, and 19
- The two latest OSU Radiation Center and TRIGA Reactor Annual Reports

b. Observations and Findings

The Reactor Supervisor maintained a schedule for reactor operations and tracked the completion of maintenance and surveillance activities. The inspector noted that selected daily, monthly, quarterly, semiannual, and annual checks, tests, verifications, and/or calibrations for TSs-required surveillances and LCO verifications were being completed as stipulated. The surveillances and LCO verifications reviewed were generally completed on schedule and in accordance with licensee procedures. It was noted that some items had to be delayed due to the reflector replacement project. However, following the replacement project, all items that had been delayed were completed prior to resuming routine operations. All the recorded results that were reviewed were within the TS and procedurally prescribed parameters. The records and logs reviewed were complete and being maintained as required.

The maintenance logs and records indicated that, when problems were noted, they were addressed and resolved. It was also noted that preventive maintenance operations were completed as required. Records showed that

routine maintenance activities were conducted at the required frequencies and in accordance with the TSs and/or the applicable procedure. Maintenance activities ensured that equipment remained consistent with the Safety Analysis Report and TS requirements.

c. Conclusion

The program for surveillance and LCO confirmations was being carried out in accordance with TSs and procedural requirements. Maintenance was also being completed as required.

7. Fuel Handling

a. Inspection Scope (IP 69001)

The inspector reviewed the following to verify adherence to fuel handling, positioning, and inspection requirements specified in TSs Sections 4.1.e and 5.3:

- Fuel handling equipment and instrumentation
- Selected portions of the Reactor Supervisor's Log, Volume 15
- Reactor operations documented in various Reactor Console Logbooks, Nos. 161–165
- Fuel handling and examination records for the past 2 years, documented on "Oregon State University TRIGA Mark II Research Reactor Fuel Element History File" cards maintained in the LEU Fuel Element History Logbook and on "Fuel Element Transfer Index Sheet," forms maintained in a separate notebook
- Selected OSTROP procedures, including Nos. 11, 16, 20, and 30

b. Observations and Findings

The inspector noted that the licensee was operating with LEU Core No. 1. It was also noted that the reactor could be operated in different configurations depending upon what equipment was installed in the B-1 or G-14 position of the core. The actual configuration was noted in the Reactor Console Logbook. Through a review of related logs and records, the inspector noted that the core configuration, control rods, and fuel were as stipulated in the TSs.

The inspector determined that the licensee was maintaining the required records of the various fuel movements that were completed and verified that the movements were conducted in accordance with procedure. The procedures used for fuel movement and inspection were acceptable, as were the precautions that were required to be established during such evolutions. Fuel element locations were being tracked by annotations to the applicable fuel element history file cards and on a fuel status board maintained in the reactor control room.

The inspector verified that the fuel handling tools and equipment were stored and properly secured.

The inspector noted that 20 percent of the elements were inspected each year, such that the entire core was inspected over a 5 year period. The elements were visually inspected to check for damage and deterioration and measured to check for concentricity or other swelling. The results of these inspections were being documented in the Reactor Console Logbook and on the applicable fuel element history forms as required. The latest fuel inspection was completed on September 11, 2015.

c. Conclusion

Reactor fuel movements were made and documented in accordance with procedure. The fuel was being inspected as stipulated by TSs Section 4.1.e and 5.3.

8. Experiments

a. Inspection Scope (IP 69001)

The inspector reviewed the following to verify that experiments were being conducted within approved guidelines specified in TSs Sections 3.8 and 4.8:

- Selected OSU approved experiments
- OSTR Thermal Column Radiation Monitoring forms
- Potential hazards identification and control of irradiated items
- Documentation of experiment review and approval by the ROC
- "General Limitations of Experiments Performed Using the OSU TRIGA Reactor"
- Selected OSU TRIGA Reactor Irradiation Request Information Sheet forms for the past 2 years
- Reactor operations documented in various Reactor Console Logbooks, Nos. 161–165
- Selected Irradiation Request Pneumatic Transfer Sample Information Forms for the past year
- OSTROP 18, "Procedures for the Approval and Use of Reactor Experiments," Rev. 8, reprinted March 2005, and Appendix A, "Procedures for Irradiating Samples in the Oregon State TRIGA Reactor," Rev. LEU-2, reprinted February 2010
- The two latest OSU Radiation Center and TRIGA Reactor Annual Reports

b. Observations and Findings

The licensee had three types of experiments at the facility, based generally on the reactivity, amount of shielding required, and the amounts of radioisotopes produced. The inspector noted that there were currently ten approved reactor

experiments available for use. The inspector verified that all the active experiments had been reviewed and approved by the ROC as required. The inspector noted that there have been essentially no changes since the previous inspection period.

A review of the records maintained by the licensee indicated that all experiments were completed under the cognizance of the Reactor Supervisor as required. The results of the experiments were documented appropriately. Irradiation Request (IR) forms, required for irradiating samples in the reactor, were also reviewed. The IR forms were being completed as required. The forms documented the individual users, the required approvals and licenses, the length of the irradiations, the expected resulting radionuclides that would be produced, and the ultimate disposition of the material following the irradiations.

c. Conclusion

The license's program for the control of experiments satisfied regulatory and TSs requirements.

9. Emergency Preparedness

a. Inspection Scope (IP 69001)

To verify proper implementation of the licensee's Emergency Preparedness Program, the inspector reviewed selected aspects of:

- Training and emergency drill records for the past 2 years
- Offsite support as documented in emergency support agreements
- Emergency response facilities, supplies, equipment, and instrumentation
- "Oregon State University Radiation Center and Oregon State TRIGA Reactor (OSTR) Emergency Response Plan," Rev. 5, latest revision dated December 2010
- "Oregon State University Radiation Center and Oregon State TRIGA Reactor (OSTR) Emergency Response Implementing Procedures (ERIP)," Nos. 0–9, latest revision dated September 2014
- OSTROP 1, "Emergency Operating Procedures," Rev. LEU-2, reprinted August 2012

b. Observations and Findings

The Emergency Plan (E-Plan) in use at the facility was the same as the version approved by the NRC and was last revised December 2010. The E-Plan was audited and reviewed annually by the ROC as required. Implementing procedures were also reviewed annually and revised by the licensee as needed to effectively implement the E-Plan. It was also noted that emergency response equipment at the facility was being maintained and inventoried at the frequencies

required in the E-Plan. Communications capabilities were acceptable and were tested periodically.

Through records review and interviews with licensee personnel, emergency responders were determined to be knowledgeable of the proper actions to take in case of an emergency. Emergency response facilities and equipment were being maintained as required. An emergency support agreement with the Good Samaritan Hospital in Corvallis had been updated and maintained as necessary. Agreements were also being maintained with the City of Corvallis Fire and Police Departments as required. Various crews and/or personnel from these off-site support organizations visited the facility periodically and received training provided by the licensee annually. As a result of the training, they were familiar with the facility and what would be required during a response.

Emergency preparedness and response training for staff was also being completed annually as required. The licensee continued to conduct drills annually as stipulated in the E-Plan in order to test communications procedures and ensure proper response of facility personnel to simulated radiological, industrial, or security problems. The inspector verified that every 2 years the drills were structured to involve, and require the participation of, off-site support agencies and personnel. Critiques were conducted following the drills to discuss and identify any strengths or weaknesses noted. Evacuation drills had been conducted each year as well.

The inspector visited the Good Samaritan Regional Medical Center and observed the equipment staged in that location for response to an emergency at the Radiation Center. From this observation and as a result of reviewing the licensee's records documenting drills and training, the inspector verified that medical support personnel were well trained, properly equipped, and knowledgeable of the actions to take in case of an emergency at the reactor facility. The inspector determined that the licensee was maintaining a good working relationship with this support group.

c. Conclusion

Emergency response facilities and equipment were being maintained as required and responders were knowledgeable of proper actions to take in case of an emergency. Emergency support agreements were being maintained with appropriate offsite agencies. Annual drills were being held and the appropriate documentation was maintained. Emergency preparedness training for staff and off-site personnel was being conducted as required.

10. Exit Interview

The inspection scope and results were summarized on January 13, 2016, 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 of these program areas.

PARTIAL LIST OF PERSONS CONTACTED

Licensee Personnel

T. Keller	Reactor Administrator
S. Menn	Senior Health Physicist
C. Oney	Reactor Supervisor
S. Reese	Director, OSU Radiation Center
R. Schickler	Reactor Engineer
S. Smith	Development Engineer

Other Personnel

S. Kerst	Office Manager, Department of Public Safety, Oregon State University
V. Lyons	Emergency Management Coordinator, Good Samaritan Regional Medical Center

INSPECTION PROCEDURE USED

IP 69001	Class II Non-Power Reactors
IP 92701	Review of Previously Identified Items

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

IF	50-243/2016-201-01	Follow-up on the issue of proper documentation of audits of the Operator Requalification Program by the ROC.

Closed

None

LIST OF ACRONYMS USED

10 CFR	Title 10 of the *Code of Federal Regulations*
ANSI/ANS	American National Standards Institute/American Nuclear Society
IFI	Inspector Follow-Up
E-Plan	Emergency Plan
IP	Inspection Procedure
IR	Irradiation Request
LCO	Limiting Conditions for Operation
LEU	Low Enriched Uranium
NRC	Nuclear Regulatory Commission
OSU	Oregon State University
OSTR	Oregon State University TRIGA Reactor
OSTROP	Oregon State University TRIGA Reactor Operating Procedure
RO	Reactor Operator
ROC	Reactor Operations Committee
SRO	Senior Reactor Operator
SSC	Structures, systems, and components
TSs	Technical Specifications