

June 19, 2014

Mr. R. J. Agasie, Reactor Director  
Nuclear Reactor Laboratory  
University of Wisconsin - Madison  
1513 University Ave., Room 1215  
Madison, WI 53706-1687

SUBJECT: UNIVERSITY OF WISCONSIN – NUCLEAR REGULATORY  
COMMISSION ROUTINE INSPECTION REPORT NO. 50-156/2014-201

Dear Mr. Agasie:

On May 19-22, 2014, the U.S. Nuclear Regulatory Commission (NRC or the Commission), completed an inspection at your University of Wisconsin Nuclear Reactor Laboratory. The inspection included a review of activities authorized for your facility. The enclosed report documents the inspection results, which were discussed on May 22, 2014, with you and the Reactor Supervisor.

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 inspectors observed various activities in progress, interviewed personnel, and reviewed selected procedures and representative records.

Based on the results of this inspection, the NRC has determined that two Severity Level IV violations of NRC requirements have occurred. The violations are being treated as a Non-Cited Violations (NCVs), consistent with Section 2.3.2.b of the Enforcement Policy. The NCVs are described in the subject inspection report. If you contest the violations or significance of the NCVs, you should provide a response within 30 days of the date of this inspection report, with the basis for your denial, to the Nuclear Regulatory Commission, ATTN: Document Control Desk, Washington DC 20555-0001, with copies to the Director, Office of Enforcement, United States Nuclear Regulatory Commission, Washington, DC 20555-0001.

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

R. J. Agasie

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Document Room or from the NRC's document system (Agencywide Document 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).

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

Sincerely,

*/RA/*

Patrick J. Isaac, Acting Chief  
Research and Test Reactors Oversight Branch  
Division of Policy and Rulemaking  
Office of Nuclear Reactor Regulation

Docket No. 50-156  
License No. R-74

Enclosure:  
NRC Inspection Report No. 50-156/2014-201

cc: See next page

University of Wisconsin

Docket No. 50-156

cc:

Mayor of Madison  
City Hall  
210 Martin Luther King, Jr. Boulevard  
Room 403  
Madison, Wisconsin 53703

Chairman, Public Service  
Commission of Wisconsin  
610 North Whitney Way  
P.O. Box 7854  
Madison, WI 53707-7854

Paul Schmidt, Manager  
Radiation Protection Section  
Division of Public Health  
Wisconsin Department of Health Services  
P.O. Box 2659  
Madison, WI 53701-2659

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

Victor Goretsky  
Assistant Director & Radiation Safety Officer  
Department Environmental Health & Safety  
271d Environmental Protection and Safety Bldg.  
University of Madison - Wisconsin  
30 E. Campus Mall  
Madison, WI 53715

R. J. Agasie

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NAME	CBassett	PIsaac
DATE	6/2/2014	6/19/2014

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

Docket No: 50-156

License No: R-74

Report No: 50-156/2014-201

Licensee: University of Wisconsin

Facility: Nuclear Reactor Laboratory

Location: Madison, WI

Dates: May 19 – 22, 2014

Inspectors: Craig Bassett  
Ossy Font

Approved by: Patrick J. Isaac, Acting Chief  
Research and Test Reactors Oversight Branch  
Division of Policy and Rulemaking  
Office of Nuclear Reactor Regulation

## EXECUTIVE SUMMARY

University of Wisconsin - Madison  
Nuclear Reactor Laboratory  
Report No: 50-156/2014-201

The primary focus of this routine, announced inspection was the onsite review of selected aspects of the University of Wisconsin (the licensee's) one megawatt Class II research reactor safety program including: 1) organizational structure and staffing; 2) review and audit and design change functions; 3) radiation protection, 4) environmental monitoring; and, 5) transportation of radioactive material 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 generally in compliance with NRC requirements. Two Non-Cited Severity Level IV violations were identified.

### Organizational Structure and Staffing

- The facility organization and staffing were in compliance with the requirements specified in the Technical Specifications.

### Review and Audit and Design Change Functions

- The review and audit functions required by Technical Specifications Section 6.2 were being acceptably completed by the Reactor Safety Committee.
- The 50.59 design change process at the facility was being followed as required and no recent changes required NRC approval.

### Radiation Protection

- Surveys were being completed and documented acceptably.
- Postings met the regulatory requirements.
- Personnel dosimetry was being worn as required and doses were well within NRC regulatory limits.
- Radiation monitoring equipment was being maintained and calibrated as required.
- Acceptable radiation protection training was being provided to staff members.
- The Radiation Protection Program and the As Low As Reasonably Achievable Program were being acceptably implemented.

Effluent and Environmental Monitoring

- Effluent monitoring satisfied license and regulatory requirements.
- Releases were within the specified regulatory and Technical Specifications limits.

Transportation of Radioactive Materials

- Radioactive material produced in the reactor was transferred to the campus's broad scope license and shipped under the auspices of that license, transferred to other authorized users on campus, or maintained at the reactor facility for use in labs in accordance with procedure.

Event Follow-up

- A Severity Level IV non-cited violation was issued for failure to comply with TS 6.1.3.1(a) which requires that, when the reactor is in operation (i.e., not secured), the minimum staffing shall be a licensed reactor operator in the control room.
- A Severity Level IV non-cited violation was issued for failure to comply with TS 6.6.2(1) which requires that, in the event of a reportable occurrence, the reactor shall be shut down until operation is authorized by the Reactor Director.

## REPORT DETAILS

### Summary of Plant Status

The University of Wisconsin (UW or the licensee) continued to operate the one megawatt TRIGA conversion reactor as needed in support of laboratory and lecture courses, research in the area of neutron irradiation, and the Reactor Sharing Program. During this inspection the facility was in the process of reloading the reactor core following the annual maintenance shutdown and the reactor was not operated.

### 1. Organizational Structure and Staffing

#### a. Inspection Scope (Inspection Procedure [IP] 69001)

To verify that the organization and staffing requirements specified in Section 6.1 of the facility Technical Specifications (TS) and associated procedures were being met, the inspectors reviewed:

- Organizational structure for the UW Nuclear Reactor Laboratory
- Selected Operations Log Sheets, checklists, and associated forms and records for 2013 and to date in 2014
- University of Wisconsin Nuclear Reactor (UWNR) Procedure Number (No.) 001, "Standing Operating Instructions," Revision (Rev.) 16
- "The University of Wisconsin Nuclear Reactor Laboratory Fiscal Year 2011 – 2012 Annual Operating Report," for the period from July 2011 through June 2012, submitted to the NRC on August 14, 2012
- "The University of Wisconsin Nuclear Reactor Laboratory Fiscal Year 2012 – 2013 Annual Operating Report," for the period from July 2012 through June 2013, submitted to the NRC on August 9, 2013

#### b. Observations and Findings

Through discussions with licensee representatives, the inspectors determined that management responsibilities at the UWNR laboratory had not changed since the previous U.S. Nuclear Regulatory Commission (NRC) inspection in this area. It was noted that the person filling the position of Reactor Supervisor at the facility had left. Subsequently the inspectors were informed that the person who had held the position of Nuclear Reactor Technician had been selected to fill the Reactor Supervisor slot. There are now two full-time staff members at the facility instead of three.

Through review of records and logs and through discussions with licensee personnel, the inspectors determined that the staffing at the facility was acceptable to support the current workload and ongoing activities. The staffing was as stipulated in the TS.

c. Conclusion

The licensee's organization and staffing remain in compliance with the requirements specified in the TS.

**2. Review and Audit and Design Change Functions**

a. Inspection Scope (IP 69001)

In order to verify that the reviews and audits required by TS Sections 6.2.3 and 6.2.4 had been completed by the Reactor Safety Committee, and to determine whether modifications to the facility were consistent with 10 CFR 50.59, the inspectors reviewed:

- Reactor Safety Committee (RSC) meeting minutes from May 2012 through the present
- Records of design changes and/or modifications to the facility documented on forms entitled, "UWNR Modification Checklist," "Safety Screening," and "Safety Evaluation"
- Audits completed by Radiation Safety Office staff personnel documented in monthly reports submitted to the RSC entitled "Nuclear Reactor Audit and Report" for 2012, 2013, and to date in 2014
- Audits completed by operations staff personnel documented in monthly reports submitted to the RSC entitled "Monthly Operations Summary" for 2012, 2013, and to date in 2014
- Audits of the facility Radiation Protection Program completed by personnel delegated that responsibility by the RSC
- UWNR Procedure No. 005, "UWNR Administrative Guide," Rev. 58
- UWNR Procedure No. 019, "Changes, Tests, and Experiments," Rev. 2
- 50.59 Screen documented in RSC Item No. 1160, "Labview Based Air Monitor Analog Output to Console Recorder," RSC approval dated May 23, 2013
- 50.59 Screen documented in RSC Item No. 1161, "Modify Reactor Laboratory (B1215) to Support the Advanced Reactor Materials Handling Laboratory," RSC approval dated May 23, 2013
- UWNR Annual Operating Reports for the past two years

b. Observations and Findings

(1) Review and Audits Functions

The inspectors reviewed the minutes of the RSC meetings from May 2012 to the present. These meeting minutes demonstrated that the RSC had met at the required frequency and that a quorum was present. The minutes also indicated that the RSC, or a designated subcommittee, was completing reviews of those items and documents required by the TS.

Through review of the meeting minutes, the inspectors noted that the RSC was providing appropriate oversight and direction for reactor.

The inspectors noted that various audits had been conducted of the facility in the areas of reactor operations, radiation protection, emergency preparedness, security, requalification of operators, and procedures. The inspectors noted that the RSC reviewed the results these audits as required. The audits were structured so that the various aspects of the licensee's radiation protection and safety programs were reviewed on a monthly basis. Major facility documents and plans were reviewed annually, as were the facility procedures. The inspectors noted that the audits and the resulting findings were adequately documented and that the licensee responded and took corrective actions to the findings as needed.

The inspectors also were able to attend one of the RSC meetings held on May 21, 2014. As had been noted through meeting minute reviews, the inspectors determined that the RSC reviewed the appropriate items and provided guidance for safe operation of the reactor.

(2) Design Control Functions

Through review of applicable records and interviews with licensee personnel, the inspectors determined that various modifications and design changes had been initiated at the facility since the last NRC operations inspection. Some of the recent changes involved various issues which included providing better output of the Air Monitor to the Console Recorder and modifications to Room B1215 to support a new Advanced Reactor Materials Handling Laboratory.

The inspectors verified that the licensee was following the established design change program and that the required reviews and approvals of the changes had been completed by the RSC, if required, prior to implementation. It was noted that the design change procedure had been revised to help licensee personnel determine whether or not a full safety evaluation was required when a change was proposed. The procedure incorporated screening criteria for this purpose. The licensee determined that none of the changes that had been proposed to date met the criteria of 10 CFR 50.59(c)(2) paragraphs (i) through (viii) which would require NRC approval of the changes.

c. Conclusions

Review and audit functions required by TS Section 6.2 were acceptably completed by the RSC. The 50.59 process for reviewing and approving design changes at the facility was being followed as required and no recent changes required NRC approval.

### 3. Radiation Protection

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

The inspectors reviewed the following to verify compliance with Title 10 of the *Code of Federal Regulations* (10 CFR) Parts 19 and 20, and TS Sections 3.4, 4.2.3, 5.4, 6.6, and 6.7.2:

- UWNR dosimetry records for 2012 through the present
- Radiological signs and posting in various areas of the facility
- Monthly Operation Summary Reports for 2012 through the present
- Latest available Radiation Program Review conducted by the University Radiation Safety Committee dated May 31, 2013
- Latest available Reactor Safety Committee Annual TS Audit - UW Reactor dated January 27, 2014
- Annual Reactor Safety Committee TS ALARA Audits dated January 25, 2012, and January 18, 2013
- Calibration and periodic check records for radiation monitoring instruments
- Health Physics Monthly Nuclear Reactor Audits and Reports for 2012 through the present
- Various Radiation Protection and As Low As Reasonable Achievable (ALARA) Program documents
- UW Environmental Health and Safety Department manual entitled "Radiation Safety for Radiation Workers," dated August 2005
- Various UWNR Procedure Forms including: No. 031 "Procedure for Facility Familiarization," and No. 100, "Surveillance Activities"
- Various UWNR Procedures including: No. 117, "Air Monitor Operating Procedure," No. 118, "Area Radiation Monitor Operating Checks," No. 171, "Air Monitor Calibration and Records," No. 172, "Sampling and Calculation Procedure - Air Particulate Activity Samples," and No. 177, "Procedure for Use and Calibration of Health Physics Instruments"
- UWNR Annual Operating Reports for the past two years

The inspectors also toured the licensee's facility and interviewed staff members as well.

#### b. Observations and Findings

##### (1) Surveys

The inspectors reviewed monthly radiation and contamination surveys of licensee-controlled areas completed by UW Environmental Health and Safety (EH&S) Department personnel. The inspectors also reviewed various weekly monitor checks and monthly general area radiation and contamination surveys conducted by reactor staff personnel. The various periodic contamination and radiation surveys had been completed within

the prescribed time frame required by procedure. Survey results were evaluated to ensure that established action levels had not been exceeded.

In addition to reviewing the various surveys and evaluating the results, the inspectors also observed the completion of a monthly survey by a member of the EH&S Department. Proper techniques were employed and no problems were noted.

(2) Postings and Notices

During tours of the facility, the inspectors observed that caution signs and postings were in place. It was also noted that restrictions established for the controlled areas were acceptable for the hazards involving radiation, high radiation, and contamination and were posted as required by 10 CFR 20, Subpart J, "Precautionary Procedures."

Copies of current notices to workers were posted in various areas in the facility. The copies of NRC Form 3, "Notice to Employees," noted at the facility were the latest issue and were posted in various areas throughout the facility as required by 10 CFR 19.11.

(3) Dosimetry

The inspector determined that the licensee used optically-stimulated luminescent dosimeters (OSLs) for whole body monitoring of beta and gamma radiation exposure with an additional component to measure neutron radiation. The dosimetry was supplied and processed by Landauer, a vendor that was accredited through the National Voluntary Laboratory Accreditation Program.

An examination of the OSL dosimeter results, indicating exposure to radiation at the facility for the past 2 years, showed that the occupational doses, as well as doses to the public, were within 10 CFR Part 20 limits.

(4) Radiation Monitoring Equipment

Calibration frequency met procedural and/or TS requirements and records were maintained as required. The inspectors verified that the instruments that were stationed for use in the Reactor Bay and in adjacent labs had been calibrated and were within the allowed calibration interval.

(5) Radiation Protection Program

The licensee's Radiation Protection Program was set forth in the UW EH&S Department manual entitled "Radiation Safety for Radiation Workers," dated August 2005, which was available in hard copy form and also maintained and available on-line. The program included requirements that all personnel who performed work in association with radioactive material were to receive training in radiation protection, policies, procedures, requirements, and facilities.

(6) ALARA Program

The ALARA Program was also outlined and established in the UW EH&S Department manual, "Radiation Safety for Radiation Workers," and in various UWNRLaboratory guidance documents and procedures. The ALARA program provided guidance for keeping doses ALARA and was consistent with the guidance in 10 CFR Part 20.

(7) Radiation Protection Training

As noted above, people who handled radioactive material, including licensee personnel, were required to receive training in radiation protection. This was accomplished by staff members attending a class, reading the manual, and successfully passing a written examination. Completion of this training by reactor staff personnel was verified by EH&S Department personnel as well as by the Reactor Director and/or the Reactor Supervisor.

(8) Tours of the Facility

The inspectors toured the licensee's facility and observed the use of dosimetry and radiation monitoring equipment. In addition, licensee personnel, accompanied by the inspectors, conducted a familiarization tour of the UW Nuclear Reactor Laboratory for the NRC Resident and Senior Resident Inspectors from the Byron and LaSalle Nuclear Power Stations. The tour was informative and allowed the Resident Inspectors to become acquainted with facility personnel and the facility layout.

c. Conclusion

The inspectors determined that the Radiation Protection and ALARA Programs satisfied regulatory requirements because: 1) surveys were being completed and documented acceptably, 2) postings met regulatory requirements, 3) personnel dosimetry was being worn as required and doses were well within the NRC's regulatory limits, 4) radiation monitoring equipment was being maintained and calibrated as required, and 5) acceptable radiation protection training was being provided.

#### 4. Effluent and Environmental Monitoring

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

The inspectors reviewed the following to verify compliance with the requirements of 10 CFR Part 20 and TS Sections 3.4, 4.2.3, 5.4, 6.6, and 6.7.2:

- Liquid release records for the period from 2012 through the present
- Airborne release records documented in the UWNR Laboratory Monthly Operations Summary Reports provided to the RSC for the period from November 2012 to the present
- UWNR Procedure Form No. 100, "Surveillance Activities," Rev. 55, RSC approval dated November 20, 2013 – forms for the period from Dec. 2012 to present
- Various UWNR Procedures including: No. 100C, "Procedure for Gross Gamma Counting of Water Samples," No. 109, "Procedure for Liquid Waste Disposal," No. 117, "Air Monitor Operating Procedure," No. 118, "Area Radiation Monitor Operating Checks," No. 171, "Air Monitor Calibration and Records," and, No. 172, "Sampling and Calculation Procedure - Air Particulate Activity Samples"
- Non-Controlled Procedure (NCP) 320, "Environmental Monitor Program-Instructions," Rev.7, dated July 2013
- NCP 321, "Environmental Monitor Locations," Rev.6, dated April 2014
- Documentation of atmospheric dose calculations using the Environmental Protection Agency COMPLY program version 1.6, dated June 15, 2007, revised Sept. 13, 2007
- UWNR Laboratory Form No. 109A, "Liquid Waste Disposal Spreadsheet"
- UWNR Annual Operating Reports for the past two years

##### b. Observation and Findings

The inspectors reviewed the calibration records of the area radiation monitors and the stack monitoring system. These systems had been calibrated annually according to procedure. The weekly start-up check records for the monitoring equipment were also reviewed.

The inspectors also reviewed the records documenting liquid releases to the sanitary sewer for the past 2 years. The inspector determined that a senior reactor operator approved liquid releases after analyses indicated that the releases would meet regulatory requirements for discharge into the sanitary sewer. This was in accordance with procedure and the results of the releases were acceptably documented in the operating log records as well as in the Annual Operating Reports.

On-site and off-site gamma radiation monitoring was accomplished using various environmental OSL dosimeters in accordance with the applicable procedures. The OSL dosimetry data indicated that there were no doses in excess of any regulatory limits. These results were also acceptably reported in the Annual Operating Reports for fiscal years 2011-2012 and 2012-2013.

b. Conclusion

Effluent monitoring satisfied license and regulatory requirements and releases were within the specified regulatory and TS limits.

**5. Transportation**

a. Inspection Scope (IP 86740)

The inspectors reviewed the following to verify compliance with regulatory and procedural requirements for shipping or transferring licensed material:

- Selected records of radioactive material transfers for 2012 and to present
- Various UWNR Procedures including: No. 005, "UWNR Administrative Guide," No. 023, "Procedure for Receipt of Radioactive Material Shipments," and, No. 131, "Production of Radioisotopes in Nuclear Reactor"
- Various UWNR Procedure Forms including: No. 100B, "Solid Waste Disposal Record," No. 130, "Request for Isotope Production," and, No. 134, "Request and Authorization for Services of the UW Reactor"

b. Observations and Findings

Records showed that radioactive material produced in the reactor and destined to be shipped off site was typically transferred to UW Central Ordering, Receiving, and Distribution Office (CORD) through the UW EH&S Department. Material transfers were documented on UWNR Procedure Form No. 130, "Request for Isotope Production." This radioactive material was then shipped by CORD under the campus's State broad scope license, State of Wisconsin Department of Health and Family Services, Radioactive Materials License No. 25-1323-01, Amendment No. 292, expiration date July 31, 2018.

Radioactive material to be used by UW authorized personnel was also transferred to the broad scope license and distributed by CORD. A list of UW authorized personnel was maintained by the licensee and documented on UWNR Procedure Form No. 134, "Request and Authorization for Services of the UW Reactor." The program for radioactive material transfer and transport was consistent with license and procedural requirements. The documents indicated the transfer of material had been signed for by UW EH&S personnel and

distributed to authorized individuals as required. The other radioactive material produced in the reactor was maintained under the reactor license for use in laboratories and used for re-irradiation or held for decay.

c. Conclusion

Radioactive material produced in the reactor was typically transferred to the campus broad scope license and shipped under the auspices of that license, transferred to other authorized users on campus, or maintained at the reactor facility for use in laboratories in accordance with procedure.

**6. Event Follow-up**

a. Inspection Scope (IP 69001)

The inspectors reviewed the licensee's actions taken in response to self-identified violations of TS 6.1.3(1)(a) and TS 6.6.2(1).

b. Observation and Findings

(1) TS Section 6.1.3(1)(a) Violation

TS Section 1.3 states that the reactor is secured when, in addition to other conditions, the reactor is shut down and the console key switch is in the "off" position and the key is removed from the console and under the control of a licensed operator or stored in a locked storage area. TS 1.3 further defines "reactor operation" as any condition wherein the reactor is not secured.

TS Section 6.1.3(1)(a) requires that the minimum staffing when the reactor is in operation (i.e., not secured) shall be a licensed reactor operator in the control room. Contrary to the above, on October 4, 2013, the reactor operator left the control room unattended for 67 seconds.

The Reactor Director was immediately notified of the event. The licensee subsequently notified the NRC's Headquarters Operations Officer (HOO) at about 3:30 p.m. and submitted a letter detailing the event which was dated October 17, 2013.

Various corrective actions were initiated. All operations staff members were made aware of the event the afternoon of October 4, 2013. The TS requirements in Section 6 were evaluated during the annual written exam conducted in accordance with the facility Proficiency Maintenance Program on November 25, 2013. Finally, because of the recurring nature of violating TS 6.1.3(1)(a) at the facility, the licensee has committed to implement an electronic surveillance system within one year to prevent further occurrences. The inspectors reviewed the actions taken and

verified that the licensee had completed all the corrective actions except for implementation of the electronic surveillance system.

The inspectors discussed the self-reported TS violation with the licensee and interviewed various reactor staff personnel. The circumstances of the event and the notifications were reviewed and the inspectors noted various mitigating circumstances. During the period when there was no operator in the control room all the control elements were fully inserted, the reactor was shut down, and there was no work in progress involving the core or fuel. Also, electrical current to the control element drive SCRAM magnets was unavailable because the SCRAM relays were de-energized. Furthermore, the protected area remained secured at all times.

The licensee was informed that the issue of a reactor operator leaving the control room while the reactor was in operation (i.e., while the key was still in the console) was a Severity Level IV violation of TS Section 6.1.3(1)(a). However, the potential safety consequence was low because the control room was generally not accessible (i.e., it is located inside a locked area) and was only vacant for about one minute. As indicated above, the inspectors determined that the problem had been identified and reviewed by the licensee and reported to the NRC as required. Corrective actions had been identified and, with the exception of one long-term item, had been completed as well. As a result, the licensee was informed that this non-repetitive, licensee-identified and corrected violation would be treated as a Non-Cited Violation (NCV), consistent with section VI.A.8 of the NRC Enforcement Policy (NCV 50-156/2014-201-01). This issue is considered closed.

The licensee was informed that the issue of implementing an electronic surveillance system within one year to prevent further occurrences of leaving the key unattended in the console would be tracked by the NRC as an Inspector Follow-up Item (IFI) and would be reviewed during a future inspection (IFI 50-156/2014-201-02).

(2) TS Section 6.6.2(1) Violation

TS Section 6.6.2(1) stipulates that, in the event of a reportable occurrence, the reactor shall be shut down until operation is authorized by the Reactor Director. Following the TS violation described in section (1) above, the licensee failed to recognize that the event was reportable. Contrary to the requirements of TS 6.6.2(1), the reactor was started without the Reactor Director's approval and ran for approximately 45 minutes until it was shutdown at 10:50 am on the same date.

The licensee conducted an analysis of the cause of the problem and determined that the RO's knowledge of the administrative controls and

reporting requirements specified in the TS Section 6 was weak. On November 25, 2013, during the annual written exam conducted in accordance with the facility Proficiency Maintenance Program, requirements in Section 6 were evaluated. This was done to ensure that all operators were familiar with and understood these requirements. The inspectors reviewed the steps taken and verified that the licensee had completed corrective actions which would preclude this situation in the future.

The inspectors discussed the self-reported TS violation with the licensee and interviewed various reactor staff personnel. The inspectors determined that the problem had been identified and reported to the NRC as required. Corrective actions had been identified and completed as well. As a result, the licensee was informed that this non-repetitive, licensee-identified and corrected violation would be treated as a Non-Cited Violation (NCV), consistent with section VI.A.8 of the NRC Enforcement Policy (NCV 50-156/2014-201-03). This issue is considered closed.

c. Conclusions

Two Non-Cited Violations were reviewed and are considered closed. One Inspector Follow-up Item was opened.

**9. Exit Meeting Summary**

The inspection scope and results were summarized on May 22, 2014, with licensee representatives. The inspectors discussed the findings for each area reviewed. The licensee acknowledged the results of the inspection.

**PARTIAL LIST OF PERSONS CONTACTED**

Licensee Personnel

R. Agasie      Reactor Director  
C. Edwards    Reactor Supervisor  
J. Blanchard   Chair, Engineering Physics Department and Member, Reactor Safety Committee

Other Personnel

V. Goretsky    Radiation Safety Officer, UW Environmental, Health, and Safety Division and  
Member, Reactor Safety Committee  
S. Oliva        Member, Reactor Safety Committee  
R. Swaney      Member, Reactor Safety Committee  
K. Sridharan   Member, Reactor Safety Committee  
P. Wilson      Member, Reactor Safety Committee  
R. Witt         Chair, Reactor Safety Committee

Other NRC Personnel

J. Draper      Resident Inspector at the Byron Nuclear Power Station, Division of Reactor  
Projects, Region III  
J. McGhee     Senior Resident Inspector at the Byron Nuclear Power Station, Division of  
Reactor Projects, Region III  
J. Robbins     Resident Inspector at the LaSalle Nuclear Power Station, Division of Reactor  
Projects, Region III  
R. Ruiz        Senior Resident Inspector at the LaSalle Nuclear Power Station, Division of  
Reactor Projects, Region III

**INSPECTION PROCEDURES USED**

IP 69001      Class II Research and Test Reactors  
IP 86740      Inspection of Transportation Activities

**ITEMS OPENED, CLOSED, AND DISCUSSED**

Opened

50-156/2014-201-01	NCV	Failure to comply with TS 6.1.3.1(a) which requires that, when the reactor is in operation (i.e., not secured), the minimum staffing shall be a licensed reactor operator in the control room.
50-156/2014-201-02	IFI	Follow-up on the licensee's actions to implement an electronic system to prevent recurrence of operators leaving the key in the reactor console.
50-156/2014-201-03	NCV	Failure to comply with TS 6.6.2(1) which requires that, in the event of a reportable occurrence, the reactor shall be shut down until operation is authorized by the Reactor Director.

Closed

50-156/2014-201-01	NCV	Failure to comply with TS 6.1.3.1(a) which requires that, when the reactor is in operation (i.e., not secured), the minimum staffing shall be a licensed reactor operator in the control room.
50-156/2014-201-03	NCV	Failure to comply with TS 6.6.2(1) which requires that, in the event of a reportable occurrence, the reactor shall be shut down until operation is authorized by the Reactor Director.

**PARTIAL LIST OF ACRONYMS USED**

10 CFR	Title 10 of the <i>Code of Federal Regulations</i>
ALARA	As Low As Reasonably Achievable
CORD	Central Ordering, Receiving, and Distribution Office
EH&S	Environmental Health and Safety
IFI	Inspector Follow-up Item
IP	Inspection Procedure
No.	Number
NCP	Non-Controlled Procedure
NCV	Non-Cited Violation
NRC	U. S. Nuclear Regulatory Commission
OSL	Optically-Stimulated Luminescent
Rev.	Revision
RSC	Reactor Safety Committee
TS	Technical Specifications
UW	University of Wisconsin
UWNR	University of Wisconsin Nuclear Reactor