October 5, 2005

Dr. James N. Petersen
Vice Provost for Research
Washington State University
Pullman, WA 99164-1030

SUBJECT: NRC INSPECTION REPORT NO. 50-27/2005-201

Dear Dr. Petersen:

This refers to the inspection conducted on September 19-22, 2005, at your Washington State University TRIGA research reactor in the Nuclear Radiation Center. The enclosed report presents the results of that inspection.

Areas examined during the inspection are identified in the report. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations of activities in progress. Based on the results of this inspection, no safety concerns or noncompliances of NRC requirements were identified. No response to this letter is required.

In accordance with 10 CFR 2.390 of the NRC's "Rules of Practice," a copy of this letter and its enclosure will be available electronically for public inspection in the NRC Public Document Room or from the Publicly Available Records (PARS) component of NRC's document system (ADAMS). ADAMS is accessible from the NRC Web site at (the Public Electronic Reading Room) http://www.nrc.gov/reading-rm/adams.html.

Should you have any questions concerning this inspection, please contact Craig Bassett at 404-562-4712.

Sincerely,

/RA/

Brian E. Thomas, Section Chief
Research and Test Reactors Section
New, Research and Test Reactors Program
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

Docket No. 50-27
License No. R-76

Enclosure: NRC Inspection Report

cc w/enclosures: Please see next page

cc:

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

Dr. James N. Petersen
Vice Provost for Research
Washington State University
Pullman, WA 99164-1030

SUBJECT: NRC INSPECTION REPORT NO. 50-027/2005-201

Dear Dr. Petersen:

This refers to the inspection conducted on September 19-22, 2005, at your Washington State University TRIGA research reactor in the Nuclear Radiation Center. The enclosed report presents the results of that inspection.

Areas examined during the inspection are identified in the report. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observations of activities in progress. Based on the results of this inspection, no safety concerns or noncompliances of NRC requirements were identified. No response to this letter is required.

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Sincerely,

/RA/

Brian E. Thomas, Section Chief
Research and Test Reactors Section
New, Research and Test Reactors Program
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

Docket No. 50-027
License No. R-76
Enclosures: NRC Inspection Report
cc w/enclosures: Please see next page

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

Docket No:	50-27
License No:	R-76
Report No:	50-27/2005-201
Licensee:	Washington State University
Facility:	Nuclear Radiation Center
Location:	Pullman, WA
Dates:	September 19-22, 2005
Inspector:	Craig Bassett
Approved by:	Brian E. Thomas, Section Chief Research and Test Reactors Section New, Research and Test Reactors Program Division of Regulatory Improvement Programs Office of Nuclear Reactor Regulation

EXECUTIVE SUMMARY

Washington State University
Report No. 50-27/2005-201

The primary focus of this routine, announced inspection included onsite review of selected aspects of the licensee's Class II research and test reactor safety programs including: organizational structure and staffing, review and audit and design control functions, reactor operations, experiments, operator requalification, fuel handling, maintenance and surveillance, facility procedures, and emergency preparedness since the last NRC inspection of these areas. The licensee's programs were acceptably directed toward the protection of public health and safety and were in compliance with NRC requirements. No safety concerns or violations of regulatory requirements were identified.

Organizational Structure and Staffing

- The operations organizational structure and responsibilities were consistent with Technical Specifications requirements.

- Shift staffing met the requirements for current operations.

Review and Audit Functions and Design Control

- The review and audit program was being conducted acceptably by the Reactor Safeguards Committee.

- The design change program satisfied NRC requirements.

Operations

- Operational activities were consistent with applicable Technical Specifications and procedural requirements.

Experiments

- Conduct and control of experiments and irradiations met the requirements specified in the Technical Specifications, the applicable experiment and irradiation authorizations, and associated procedures.

Operator Licenses, Requalification, and Medical Activities

- Operator requalification was conducted as required by the Reactor Staff Requalification Program.

- A medical examination for each reactor operator with an active license was being completed every two years as required.

Fuel Handling

- Fuel handling activities and documentation were as required by Technical Specifications and facility procedures.

Maintenance and Surveillance

- Maintenance logs, records, performance, and reviews satisfied Technical Specifications and procedure requirements.

- The program for tracking and completing surveillance checks and Limiting Conditions for Operation verifications satisfied Technical Specifications requirements and licensee administrative controls.

Procedures

- Facility procedural review, revision, control, and implementation satisfied Technical Specifications requirements.

Emergency Preparedness

- The Emergency Plan and Implementing Procedures were being reviewed and updated biennially as required and were acceptable.

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

- Off-site support was acceptable and communications capabilities were adequate.

- Annual drills were being conducted and critiques were being held as required by the Emergency Plan.

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

REPORT DETAILS

Summary of Plant Status

The licensee's one megawatt Research and Test Reactor continued to be operated in support of education, operator training, irradiation of various materials, and experiments involving Boron Neutron Capture Therapy work. During the inspection, the reactor was operated continuously on Monday through Wednesday and shut down on Thursday as required and in accordance with applicable procedures to support ongoing irradiation activities.

1. Organizational Structure 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 Sections 6.1-6.3 of Technical Specifications (TS), Amendment No. 18, dated August 26, 2004, were being met:

- staff qualifications
- management responsibilities
- staffing requirements for the safe operation of the facility
- Washington State University (WSU) Nuclear Radiation Center organizational structure and staffing
- WSU Nuclear Radiation Center Reactor Operating Log (O.1) sheets from January through September 2005
- WSU Nuclear Radiation Center Administrative Procedure Number (No.) 1, "Responsibilities and Authority of Reactor Operating Staff," (not dated)

b. Observations and Findings

The Nuclear Radiation Center organizational structure and the responsibilities of the reactor staff had not changed since the last inspection. However, staffing levels had changed. The Reactor Supervisor present during the last NRC inspection, who was also one of the facility Senior Reactor Operators (SROs), had found other employment. She was replaced by another person on staff at the facility who was also an SRO. It was noted that, during the summer, a person who had worked at the facility previously had returned and had taken the NRC examination to become an SRO. He subsequently received his license. Three other individuals had taken the NRC examination to become Reactor Operators (ROs) and they had received their licenses as well.

The inspector determined that the reactor operations staff met the training and experience requirements outlined in ANSI/ANS-15.4, "Selection and Training of Personnel for Research Reactors," dated 1977, as stipulated in the TS. In addition, the operations log and associated records confirmed that shift staffing satisfied the requirements for duty and on-call personnel.

c. Conclusions

The operations organizational structure and responsibilities were consistent with TS requirements. Shift staffing met the requirements for current operations.

2. Review and Audit Functions and Design Control

a. Inspection Scope (IP 69001)

In order to verify that the licensee had established and conducted reviews and audits as required in TS Section 6.5, the inspector reviewed selected aspects of:

- Reactor Safeguards Committee (RSC) meeting minutes for 2004 to date
- safety review and audit records documented on WSU Nuclear Radiation Center forms entitled, "Reactor Safeguards Committee Facility Records Quarterly Audit," for the period from April 2004 through the present
- licensee annual reports submitted to the NRC which were entitled "Annual Report on the Operation of the Washington State University TRIGA Reactor" for the periods from July 1, 2003 through June 30, 2004, and July 1, 2004 through June 30, 2005
- WSU Nuclear Radiation Center Administrative Procedure No. 3, "Approval and Review of Facility Modifications and Special Tests or Experiments," (not dated)

b. Observations and Findings

(1) Review and Audit Functions

The RSC membership satisfied TS requirements and the Committee's procedural rules. The RSC, or a subcommittee thereof, held quarterly meetings as required and a quorum was present. Review of the committee meeting minutes indicated the RSC provided appropriate guidance and direction for reactor operations, and ensured suitable use and oversight of the reactor. The inspector noted that audits were conducted during the meetings held by the RSC.

Since the last inspection, all required audits of reactor facility records and reviews of operating abnormalities, changes to procedures, equipment changes, and proposed tests or experiments had been completed and documented. Additionally, the annual review of the radiation protection program and the biennial reviews of the standard operating procedures, the emergency plan, and the security plan had been conducted and acceptably documented.

(2) Design Control Functions

Through records review and interviews with licensee personnel, the inspector determined that two major modifications had been proposed and completed since the last NRC inspection at the facility in June 2004 (refer to NRC Inspection Report No. 50-27/2004-201). The most important change involved replacement of the facility NLW-2 Channel Log-N Wide-Range Channel (which had failed

along with the associated fission chamber) with a modern NLW-1000 Channel. After completion of a safety evaluation by the staff and preparation of a 50.59 review, it was concluded that the change would not increase the frequency of an accident, would not increase the likelihood of the occurrence of a malfunction of a structure, system, or component important to safety, and would not result in the increase in the consequences of an accident or create an accident of a different type than any previously evaluated in the Safety Analysis Report. Subsequently, the evaluation was presented to the RSC and it was reviewed and approved. It was noted that the change did not represent a safety question or require a change to the TS or a license amendment.

c. Conclusions

The review and audit program was being conducted acceptably by the Reactor Safeguards Committee. The design change program satisfied NRC requirements.

3. Operations

a. Inspection Scope (IP 69001)

The inspector reviewed selected aspects of the following to verify compliance with TS Section 6.2 and the applicable procedures:

- Reactor Operating Log (O.1) sheets from January 2005 through September 2005, entitled "WSU Nuclear Radiation Center Reactor Log," NRC Form No. 22, latest Revision (Rev.) dated March 2004
- selected entries on Reactor Start-Up Checkoff (O.3) forms entitled WSU Nuclear Radiation Center Form No. 34, "WSU Reactor Start-Up Checkoff," latest Rev. dated July 14, 2005
- Scram Summary Log (S.1) entries from January 2004 through August 2005
- Pulsing Summary Log (S.2) entries from November 2004 through August 2005
- staffing for operations as recorded on the Reactor Log sheets
- observation of selected operations activities on September 20 and 21, 2005
- licensee annual reports submitted to the NRC which were entitled "Annual Report on the Operation of the Washington State University TRIGA Reactor" for the periods from July 1, 2003 through June 30, 2004, and July 1, 2004 through June 30, 2005
- WSU Nuclear Radiation Center Standard Operating Procedure (SOP) No. 1, "Standard Procedure for Use of the Reactor," dated February 14, 2000
- WSU Nuclear Radiation Center SOP No. 4, "Standard Procedure for Startup, Operation, and Shutdown of the Reactor," dated May 18, 2005

b. Observations and Findings

(1) Routine Operations

Reactor operations were carried out following written procedures and in accordance with TS requirements. Information on the operational status of the

facility was recorded in log books and on checklists as required by procedures and TS. Use of maintenance and repair logs satisfied procedural requirements. Operational problems and events noted in the operations log were reported, reviewed, and resolved as required by TS and administrative procedures. Scrams were identified in the logs and records, reported as required, and their cause(s) resolved before the resumption of operations under the authorization of an SRO.

The inspector verified that the date and log entries required to be made by the TS and procedure were logged and cross referenced with other logs and/or forms, as required, and that TS operational limits had not been exceeded.

(2) Pulsing Capability

TS Section 4.3.1(5) requires that the reactor shall be pulsed semiannually to compare fuel temperature measurements and peak power levels with those of previous pulses of the same reactivity.

As noted previously, following an appropriate 50.59 evaluation and review, the facility staff changed out the NLW-2 Channel in April 2005 because it had failed. It was replaced with a modern NLW-1000 wide range channel. However, when the licensee attempted to conduct the required semiannual pulse in May 2005, they found that they were unable to perform a test pulse due to the installation and configuration of the new NLW-1000 Channel. Consequently, the licensee identified the fact that they would not be in compliance with TS Section 4.3.1(5) as a result and submitted a letter on July 10, 2005, to the NRC detailing the situation.

During this inspection, the inspector reviewed the problem. The licensee indicated that they would attempt to correct the situation during the coming few weeks and that they would perform a test pulse as soon as the NLW-1000 could be configured to prevent rod withdrawal when in the pulse mode. In the interim, the issue was identified as an Unresolved Item[1] (URI) by the inspector and will be reviewed during a subsequent NRC inspection (URI 50-27/2005-201-01)

c. Conclusions

The operational activities were found to be consistent with applicable TS and procedural requirements.

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[1]An Unresolved Item is a matter about which more information is required to determine whether the issue in question is an acceptable item, a deviation, a nonconformance, or a violation.

4. Experiments

a. Inspection Scope (IP 69001)

To verify compliance with the licensee's program for conducting experiments and irradiations as outlined in TS Sections 3.10 and 6.5.4 and in various procedures, the inspector reviewed selected aspects of:

- WSU Nuclear Radiation Center Reactor Operating Log (O.1) sheets from January through September 2005
- experiment approvals documented on WSU Nuclear Radiation Center Form No. 2, entitled "Experiment Request Form," form dated December 1972, with the associated WSU Nuclear Radiation Center Form No. 4, entitled "Experiment Authorization Form," form dated August 1975
- irradiation approvals documented on WSU Nuclear Radiation Center Form No. 1, entitled "Irradiation Request Form," (O.10) dated October 1992, with the associated WSU Nuclear Radiation Center Form No. 3, entitled "Irradiation Authorization Form," form dated October 1980
- "WSU NRC Irradiation Data Log" (O.11) sheets for the period from January 2005 to the present
- "NRC Iridium Irradiation Data Log" (O.11) sheets for the period from January 2005 to the present
- WSU Nuclear Radiation Center SOP No. 1, "Standard Procedure for Use of the Reactor," dated February 14, 2000
- WSU Nuclear Radiation Center SOP No. 2, "Standard Procedure for Performing Irradiations Using the Reactor," dated August 25, 2005
- WSU Nuclear Radiation Center SOP No. 3, "Standard Procedure for Performing Experiments Using the Reactor," dated February 14, 2000

b. Observations and Findings

No new experiments or irradiation requests had been initiated, reviewed, or approved since the last inspection. The inspector verified that if a new experiment or irradiation were to be initiated, it would be reviewed and approved by the RSC and would be completed under the supervision of the Reactor Supervisor and in accordance with TS requirements.

The inspector reviewed the existing experiment and irradiation authorization documents, Irradiation Data Log sheets, and the Reactor Logbook, and interviewed staff members. The inspector verified that the approved experiments and irradiations that were completed were installed, constrained, conducted, and removed as required by the TS. The appropriate data was recorded and the radioactive material produced was handled and controlled as required.

c. Conclusions

The conduct and control of experiments and irradiations met the requirements specified in the TS and the applicable experiment and irradiation authorizations and procedures.

5. 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 and that medical requirements were met:

- WSU NRC Reactor Staff Requalification Program, latest Rev. dated January 4, 1994
- medical examination records
- biennial written examination records
- effective dates of current operator licenses
- logs and records of reactivity manipulations maintained in the Quarterly RO/SRO Activity Report (O.15) Notebook and documented on forms entitled, "Quarterly Operational Hours for RO and SRO," latest Rev. dated January 2000
- active duty status and Annual Reactor Operating Test results noted and maintained in the Requalification Schedule forms (A.3)

b. Observations and Findings

At the time of the inspection, there were four qualified SROs and three qualified ROs working at the facility. The inspector verified that all but one of the operators' licenses were current. That person's license renewal application had been forwarded to the NRC 30 days prior to the expiration date as required.

A review of the logs and records showed that the training and requalification program was being followed and that biennial written examinations had been completed as required. 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/reactivity manipulations 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 Operations Tests. The program was up-to-date and training was current. The inspector noted that all operators were receiving the required biennial medical examinations as well.

c. Conclusions

The requalification and training program was up-to-date and acceptably maintained. A medical examination for each operator was being completed biennially as required.

6. Fuel Handling

a. Inspection Scope (IP 69001)

The inspector reviewed selected aspects of the following to ensure that the licensee was complying with TS Sections 4.4, 5.1, 5.2, and 6.9:

- Core Change Log (O.6)
- Core Reactivity Parameters Log (O.7)
- fuel handling equipment and instrumentation
- WSU Nuclear Radiation Center Reactor Log sheets from 2004 through the present
- WSU Nuclear Radiation Center Administrative Procedure No. 9, "Special Nuclear Material Accountability Plan," dated May 1989
- WSU Nuclear Radiation Center SOP No. 7, "Standard Procedure for Core Changes and Fuel Movement," dated February 17, 1995
- WSU Nuclear Radiation Center SOP No. 8, "Standard Procedure for Control Element Maintenance, Removal, and Replacement," dated February 17, 1995

b. Observations and Findings

Procedures for refueling, fuel movement, and TS required surveillances ensured controlled operations for Core 34-A, which was a mixed core of FLIP (fuel lifetime improvement program) and standard fuel elements. A detailed plan for performing fuel movement was required to be developed prior to each fuel movement operation.

The inspector noted that the data recorded for fuel movements that had been conducted in the past were acceptable and were required to be cross referenced in the operations logs. Log entries indicated fuel movements were completed under the direct supervision of an SRO as required. Through records review and interviews with licensee personnel, the inspector determined that various fuel movement operations had been conducted since the last NRC inspection in this area occurred at the facility in May 2003. The most significant fuel movement involved changing the core configuration from 33X to 34-A in late 2003.

c. Conclusions

The fuel handling activities and documentation were as required by facility TS and procedures.

7. Maintenance and Surveillance

a. Inspection Scope (IP 69001)

To verify compliance with TS Sections 3, 4, and 5, the inspector reviewed selected aspects of:

- Control Element Calibration Log (O.4)

- Control Element Inspection Log (O.5)
- Core Reactivity Parameters Log (O.7)
- Maintenance Log (O.8), pages 85-95
- Preventative Maintenance Checklists (O.2) for 2004 and to date in 2005
- Power Calibration Log forms (also in O.2) for 2003 through the date of the inspection
- Monthly Console and Auxiliary Equipment Checklist Log (O.9) containing equipment maintenance as documented in the WSU Nuclear Radiation Center Form No. 40, entitled "Console Auxiliary Equipment Maintenance Checklist," form dated May 2000
- RSC meeting minutes for the past two years
- WSU Nuclear Radiation Center Reactor Operating Log (O.1) sheets from January through September 2005
- licensee annual reports submitted to the NRC which were entitled "Annual Report on the Operation of the Washington State University TRIGA Reactor" for the periods from July 1, 2003 through June 30, 2004, and July 1, 2004 through June 30, 2005
- WSU Nuclear Radiation Center Administrative Procedure No. 5, "Surveillance Documentation Review," (not dated)
- WSU Nuclear Radiation Center Administrative Procedure No. 6, "Performance of Maintenance Activities," (not dated)
- WSU Nuclear Radiation Center SOP No. 5, "Standard Procedure for Performing Preventive Maintenance on the Reactor and Associated Equipment," dated May 18, 2005
- WSU Nuclear Radiation Center SOP No. 8, "Standard Procedure for Control Element Maintenance, Removal, and Replacement," dated February 17, 1995
- WSU Nuclear Radiation Center SOP No. 13, "Standard Procedure for Performing Power Calibrations," dated May 18, 2005
- WSU Nuclear Radiation Center SOP No. 14, "Standard Procedure for Alignment of the Fuel Temperature System," dated December 4, 2003
- WSU Nuclear Radiation Center SOP No. 15, "Standard Procedure for Control Element Calibration," dated December 4, 2003
- WSU Nuclear Radiation Center SOP No. 24, "Standard Procedure for Purification System Resin and Filter Change," dated December 4, 2003
- WSU Nuclear Radiation Center SOP No. 32, "Standard Procedure for the Transfer of Non-Fuel Devices and Experimental Apparatus into and out of the Reactor Pool," dated December 4, 2003

b. Observations and Findings

(1) Maintenance

The Inspector noted that routine and preventive maintenance was controlled by and documented in the maintenance or reactor operations logs and the monthly Console Auxiliary Equipment Maintenance Checklists consistent with the TS and licensee procedures. Unscheduled maintenance or equipment repair was reviewed to determine if the work required a 50.59 evaluation. Verifications and operational systems checks were performed to ensure system operability before return to service.

(2) Surveillance

The Inspector determined that the daily, weekly, monthly, semiannual, and other periodic checks, tests, and verifications for TS required Limiting Conditions for Operations (LCOs) were being completed as required. In addition, all surveillance and LCO verifications reviewed were completed on schedule as required by TS and in accordance with licensee procedures. Extensive checklists were used to track completion of the various required surveillances and LCO verifications. The checklists included the date the activity was completed and by whom. These checklists provided acceptable documentation of the results and proper control of reactor operational tests and surveillances. Some of the daily and periodic checks of equipment operability included recording system parameters such as temperature, pressure, and flow. All recorded results observed by the inspector were within prescribed TS and procedure parameters and in close agreement with the previous surveillance results.

c. Conclusions

The maintenance logs, records, performance, and reviews satisfied TS and procedure requirements. The program for tracking and completing surveillance checks and LCO verifications satisfied TS requirements and licensee administrative controls.

8. Procedures

a. Inspection Scope (IP 69001)

The inspector reviewed selected aspects of the following to verify that the licensee was complying with the requirements of TS Sections 6.5.4 and 6.8:

- observation of procedure implementation
- selected administrative and standard operating procedures changes (A.2)
- records of procedure revision or review documented on licensee forms entitled, “Procedure Approval and Review Form,” (not dated)
- administrative controls as outlined in WSU Nuclear Radiation Center Administrative Procedure No. 2, “Standard Procedure for the Approval, Revision, and Review of Standard Operating Procedures,” (not dated)

b. Observations and Findings

The Inspector found that operations procedures were available for those tasks and activities required by the TS and facility directives and that written changes were reviewed and approved by the RSC as required. “Official” copies of the sets of procedures, stored in the Control Room and the Director’s office, were maintained up-to-date with the latest revisions in place. In addition, the SOPs were reviewed biennially as required by TS Section 6.5.4 with the last review having been completed August 25, 2005.

Through observation of reactor operations and experiment handling, the inspector verified that licensee personnel conducted TS activities in accordance with applicable procedures. Training of personnel on procedures and changes was determined to be acceptable.

c. Conclusions

The review, revision, control, and implementation of procedures by the licensee satisfied TS requirements.

9. Emergency Preparedness

a. Inspection Scope (IP 69001)

To ascertain whether the licensee was acceptably implementing the various aspects of their emergency preparedness program, the inspector reviewed selected aspects of:

- WSU Nuclear Radiation Center Short Form Emergency Procedure, latest Rev. dated May 25, 2005
- Administrative Requirements Schedule Log (A.4) sheets
- emergency response facilities, supplies, equipment, and instrumentation
- training records for licensee staff and support personnel
- offsite support as documented in the Letter of Agreement with the hospital
- emergency drills and exercises for the past two years
- WSU Nuclear Radiation Center SOP No. 6, “Standard Procedure in the Event of an Emergency Situation,” dated December 4, 2003
- WSU Nuclear Radiation Center SOP No. 30, “Standard Procedure for Security and Emergency Plan Training for Nuclear Radiation Center, Radiation Safety Office, and Campus Police Personnel,” dated November 18, 1997

b. Observations and Findings

The Emergency Plan (E-Plan) in use at the facility, entitled “Emergency Preparedness Plan for the Nuclear Radiation Center, Washington State University,” was the same as the version most recently approved by the NRC and was dated June 19, 1994. The E-Plan was audited and reviewed biennially as required. Implementing procedures were reviewed and revised as needed to effectively implement the E-Plan. Emergency facilities, instrumentation, and equipment were being maintained and controlled, and supplies were being inventoried quarterly as required in the E-Plan.

The Inspector determined through records review and through interviews with licensee personnel that emergency responders were knowledgeable of the proper actions to take in case of an emergency. The agreement with the Pullman Memorial Hospital had been updated and maintained as necessary. Communications capabilities were acceptable with these support groups. Off-site support for the facility was verified to be acceptable and in accordance with the E-Plan. The alarm system had been tested weekly and monthly as stipulated in the E-Plan.

In addition, the inspector determined that the emergency drills were being conducted as required by the E-Plan. The most recent drill, which simulated a terrorist attack, had been conducted August 12, 2005, and required the response of the facility emergency organization and various off-site support organizations. Critiques were written following the drills to document any strengths and weaknesses identified and to develop possible solutions to any problems noted.

The inspector toured the Pullman Fire Station with a licensee representatives on September 22, 2005. During the tour the inspector asked Fire Department (FD) personnel about their response capabilities and what the Nuclear Radiation Center (licensee) could do to help the FD personnel fulfill their role of providing support services for the reactor facility. The FD representatives stated that they had received valuable training during preparations for the last drill and that continued drills would provide needed experience. The fire station was noted to be well equipped to handle fire emergencies and the personnel were knowledgeable of the correct actions to take in response to problems at the facility. The inspector noted that there was a very good working relationship between FD staff and licensee personnel.

c. Conclusions

The emergency response program was conducted in accordance with the requirements stipulated in the Emergency Preparedness Plan.

10. Exit Interview

The inspection scope and results were summarized on September 22, 2005, with members of licensee management. The inspector described the areas inspected and discussed in detail the inspection findings. The licensee did not identify as proprietary any of the materials reviewed by the inspector although some of the material was designated as Safeguards Information. No dissenting comments were received from the licensee and no safeguards information is contained in this report.

PARTIAL LIST OF PERSONS CONTACTED

Licensee

E. Corwin	Reactor Supervisor and SRO
K. Fox	Project Director and SRO
D. King	Reactor Technician and RO
K. Marley	Engineering Technician and RO
G. Tripard	Director, Nuclear Radiation Center

Other Personnel

M. Heston	Operations Officer, Pullman Fire Department

INSPECTION PROCEDURES USED

IP 69001	Class II Research and Test Reactors

ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

50-27/2005-201-01	URI	Review the actions taken by the licensee to perform a test pulse as soon as the NLW-1000 is configured to prevent rod withdrawal when in the pulse mode.

Closed

None

PARTIAL LIST OF ACRONYMS USED

ADAMS	Agencywide Documents and Management System
CFR	Code of Federal Regulations
E-Plan	Emergency Plan
FD	Fire Department
IP	Inspection Procedure
LCO	Limiting Conditions for Operation
NRC	Nuclear Regulatory Commission
PARS	Publicly Available Records
Rev.	Revision
RO	Reactor Operator
RSC	Reactor Safeguards Committee
SOP	Standard Operating Procedure
SRO	Senior Reactor Operator
TS	Technical Specifications
URI	Unresolved Item
WSU	Washington State University