

U. S. NUCLEAR REGULATORY COMMISSION

REGION V

Report No. 50-243/82-03

Docket No. 50-243 License No. R-106 Safeguards Group _____

Licensee: Oregon State University

Corvallis, Oregon 97331

Facility Name: TRIGA (OSTR)

Inspection at: TRIGA Site, Corvallis, Oregon

Inspection conducted: October 19-21, 1982

Inspectors: *Dennis J. Willett* 11-9-82
B. J. Willett, Reactor Inspector Date Signed

Approved by: *J. T. Dodds* 11-10-82
R. T. Dodds, Chief, Reactor Projects Section No. 1 Date Signed

Summary:

Inspection on October 19-21, 1982 (Report No. 50-243/82-03)

Areas Inspected: Routine, unannounced inspection of organization, logs and records; review and audit; requalification training; procedures; surveillance; experiments; and miscellaneous independent inspection effort, including observation of selected aspects of facility operation. This inspection involved 20 regular inspector-hours by one NRC inspector.

Results: Of the eight areas inspected, no items of noncompliance or deviations were identified.

DETAILS

1. Persons Contacted

Principal Licensee Employees

*Dr. C. H. Wang, Reactor Administrator, Radiation Center Director

*Dr. S. E. Binney, Chairman, Reactor Operations Committee

W. T. Carpenter, Reactor Operator

*Dr. B. Dodd, Assistant Reactor Administrator

*Denotes persons attending exit interview.

2. Organization, Logs and Records

The organization structure and personnel responsible for the operation and administration of the Oregon State TRIGA reactor facility remain unchanged from that previously reported.

Through discussions with licensee representatives and an examination of facility records, on a sampling basis, the inspector found the qualifications and staffing of licensee personnel, including members of the Reactor Operations Committee, consistent with technical specification requirements.

Representative samples of facility operation and maintenance logs were examined to verify performance of operational activities consistent with administrative and regulatory requirements. The specific records examined were as follows:

- Daily Power logs
- Control Room Log Sheets
- Console Logs
- Startup Checklists
- Shutdown Checklists
- Reactor Supervisor's Log
- Rod Calibration
- Power Calibration
- Administrative Procedures
- Facility Change Bulletins (FCBs)
- Operational Instruction Bulletins (OIBs)
- Scram Log

Changes to the facility design and facility procedures were found to have been completed consistent with the criteria of 10 CFR 50.59.

No items of noncompliance or deviations were identified.

3. Review and Audit

The licensee's review and audit activities since the previous inspection were examined by the inspector. This review included discussions with licensee personnel and an examination of selected samples of the following documents:

Reactor Operations Committee (ROC) Charter
ROC Audit Reports
Minutes of ROC meetings, November 1981 to present
Annual Report

The inspector's review of the minutes of the Reactor Operations Committee meetings indicated compliance with the requirements regarding meeting frequency and quorum. This review included considerations of membership and meeting contents. Proposed changes and modifications to the facility, procedures, and experiments were found to have been completed consistent with the requirements of 10 CFR 50.59.

Through a review of the licensee's logs and records and discussions with licensee personnel, the inspector verified the licensee's activities as outlined and reported in the annual report.

No items of noncompliance or deviations were identified.

4. Experiments

The inspector examined selected irradiation requests and experiment procedures. The inspector verified by review of records and discussion with facility personnel that the experiments were reviewed and approved by the Reactor Operations Committee, as required. Limits on shutdown margin, excess reactivity, and individual/total worth of experiments were not exceeded. This review suitably considered regulatory requirements, potential hazards, and radiological factors. No new experiments have been approved.

No items of noncompliance or deviations were identified.

5. Operator Requalification Program

The licensee's operator requalification program was reviewed against the requirements of 10 CFR 55 and the approved operator requalification program. Records and discussions with licensee personnel showed the scheduling and conduct of lectures and examinations required by NRC regulations have been satisfactorily accomplished since the last inspection.

The inspector verified that the licensee was maintaining and using a log at the operator's console to keep licensed personnel aware of changes in procedures (OIBs), facility design (FCBs), and the facility license. The inspector also verified the licensee's actions regarding the documentation of operator operational competency.

No items of noncompliance or deviations were identified.

6. Reactor Operational Procedures

This inspection included an examination of the licensee's operating procedures for technical adequacy and for the compliance with regulatory requirements. Procedures reviewed were those associated with reactor startup and steady state operation, reactor shutdown, and conduct of experiments. A walk-through of selected procedure checklists verified that they would accomplish their intended purposes.

No items of noncompliance or deviations were identified.

7. Surveillance

The inspector examined selected surveillance activities and records to verify their completion as required by technical specifications; and that facility operation was consistent with limiting conditions for operation. The inspector verified by examination of appropriate checklist, records, and surveillance documents that the licensee had complied with the applicable requirements. The parameters sampled included: rod drop times, excess reactivity, reactor pool water conductivity, fuel inspection, and power calibrations.

No items of noncompliance or deviations were identified.

8. Design Follow-up

The inspector reviewed the activities surrounding the transfer of TRIGA fuel from the facility. This review included a video tape of a portion of the activity, a review of records, and discussions with licensee personnel. The inspector verified that the appropriate review, approval, and evaluation procedures were followed and that required documentation was incorporated into appropriate facility records. The inspector reviewed the safety evaluation for the transfer and storage of TRIGA fuel into storage racks in the back shield tank. This evaluation was found to be consistent with the requirements of 10 CFR 50.59.

No items of noncompliance or deviations were identified.

9. Independent Inspection

The inspector observed daily startup checks and power mode operation. The inspector walked throughout areas of the facility to inspect the general state of housekeeping and to check that monitoring instrumentation was reading or recording as necessary. No unusual fluid leaks or piping vibrations were observed.

No items of noncompliance or deviations were observed.

10. Exit Interview

The inspector met with licensee representatives (denoted in paragraph 1) at the conclusion of the inspection on October 21, 1982. The scope and findings of the inspection were discussed and summarized as set forth in paragraphs 2 through 9.