U. S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION ENFORCEMENT
REGION IV

IE Inspection Report No. 50-192/80-01

Docket No. 50-192 License No. R-92

Licensee: The University of Texas

Facility: Triga Mark I - 250 Kwt

Inspection at: Austin, Texas

Dates of Inspection: April 16-18, 1980

Inspectors: R. Smith
R. Smith, Reactor Inspector — Date: 4-29-80

Approved by: G L Madsen
G. L. Madsen, Chief, Reactor Operations and Nuclear Support Branch — Date: 4-25-80

Inspection Summary

Inspection on April 9-11, 1979 (Report No. 50-192/79-02)

Areas Inspected: Routine, announced inspection of plant status, facility organization, logs and records, review and audit functions, requalification training, procedures, surveillance testing, experiments, environmental protection, emergency plan, and radiation control. The inspection involved eighteen (18) inspector-hours on-site by one (1) NRC inspector.

Results: Of the twelve (12) areas inspected, no items of noncompliance or deviations were identified.

Details

1. Persons Contacted

*D. E. Klein, Director Nuclear Reactor Labortory
T. L. Bauer, Researcher
*J. A. Burack, Reactor Supervisor
T. Sanders, Prospective Senior Reactor Operator

*Attended exit interview

2. Plant Status

During this inspection the reactor was shut down and a fuel inspection was in progress. The inspector toured the facility and observed the following:

(a) radiation controls;

(b) access controls;

(c) general cleanliness; and

(d) actual fuel movements.

3. Organization

The inspector reviewed the reactor operational organization to determine compliance with the technical specification.

No items of noncompliance or deviations were noted.

4. Logs and Records

The inspector reviewed the following logs from March 1979 to April 1980:

Reactor Operation Log

Reactor Calibration and Maintenance Log

Reactor Testing and Maintenance Check List

Weekly Calibration Log

No item of noncompliance or deviations were noted.

5. Review and Audit

This inspection effort was the examination of records related to the review and audit functions performed by the Reactor Committee and the Radiation Safety Comm ttee.

The Reactor Committee met four times during 1979, and the Radiation Safety Committee met two times. There were no facility design changes to the facility since the last inspection.

No items of noncompliance or deviations were noted.

6. Requalification Training

The objective of this inspection effort was to verify that the Requalification Training Program is being conducted as approved by the Commission.

The inspector reviewed the "Requal Documentation" book maintained by the Reactor Supervisor for the following items: (a) annual exams and answers for each individual; (b) documentation of required manipulations; (c) records of operator evaluations; (d) attendance at any required lectures; (e) records of review of changes in facility, procedures and license; and (f) records of review of emergency procedures.

No items of noncompliance or deviations were noted.

7. Procedures

The inspector reviewed the content, scope and control of facility procedures to determine if they are adequate to control safety-related operations.

The inspector reviewed the Startup Operating Procedures for Pulse Operation and Pulse Interlock Checks for technical adequacy and to verify that they meet Technical Specification requirements. The inspector noted that the following definition for control and use of logs and operations was not provided in procedures.

a. The responsibilities of operators and senior operators regarding adherence to procedures are clearly established in writing.

b. Methods of changing or deviating from procedures, both temporary and permanent, including approvals and levels of subsequent review, are clearly established.

c. The level of review and approval of new and substantially changed procedures is clearly established.

These administrative techniques for control of the procedures are not required by the technical specification. However, the licensee stated these controls would be included in the procedures. This item will remain open until this action is complete.

No item of noncompliance or deviations were noted.

8. Experiments

From records reviewed and discussions with the licensee personnel, the inspector determined that the experiments conducted since the last inspection were "Routine Experiments" as defined by Technical Specification.

9. Surveillance

Sections C through F of the licensee's TS has requirements for functionally testing, calibrating and inspecting specified instrumentation, controls and systems of the facility. These requirements, which are herein referred to as "Surveillance Requirements," establish the operability of the systems/components. The objective of this inspection effort was to verify that the licensee is complying with these surveillance requirements.

The licensee has established a "Yearly Checklist" which lists all of the surveillance requirements of the TS and additional requirements established by his internal procedures. The checklist is prepared in the form of a bar chart which also serves as a mechanism for scheduling the tests/checks. When a scheduled test/check is satisfactorily completed, the licensee writes the date of the test/check on the chart and initials the entry. The date and initial thereby serve as a record of completion of the test or check.

The inspector reviewed the checklist for the period January 1978 through April 1980, and verified that all of the required surveillance requirements had been scheduled and completed. All of the tests/checks had been completed at the frequency required by the TS or the licensee's procedures.

The inspector also reviewed licensee records to verify the results of the tests and checks recorded on the yearly checklist. The results of the tests/checks were documented in one or more of the following records:

a. Reactor Operations Log Book

b. Reactor Calibration Log Book

c. Instrument Log Book

d. Reactor Maintenance Log Book

During this inspection period the licensee performed the annual fuel inspection which is controlled by the procedure Fuel Inspection and Measurement of Bow and Elongations. The inspector observed part of this fuel inspection.

The procedure Fuel Inspection and Measurement of Bow and Elongations did not include the definition of actual fuel movements from the reactor core to the fuel storage racks and the fuel inspection station. The inspector discussed this with the licensee and he stated

these details would be included in future procedures to control the fuel inspection. This item will remain open until this action is complete.

No items of noncompliance or deviations were noted.

10. Environmental Protection

The inspector checked the facility for potential discharge paths that might permit unmonitored or unauthorized releases of radioactive materials.

No items of noncompliance or deviations were noted.

11. Emergency Plan

The licensee's emergency plan was reviewed to verify that it is adequate to deal with emergencies and is in conformance with regulatory requirements.

No items of noncompliance or deviations were noted.

12. Radiation Control

The inspector reviewed the licensee's program for radiation protection and contamination control. The following items were reviewed: (a) posting and labeling; (b) marking of restricted areas; (c) protective clothing use; (d) personal monitoring devices; (e) exit monitoring; (f) instructions to personnel; (g) exposure records; and (h) radiation and contamination survey records.

No items of noncompliance or deviations were noted.

13. Exit Interview

The inspectors met with licensee representatives (denoted in paragraph 1) at the conclusion of the inspection on April 18, 1980. The inspector summarized the scope of the inspection and the findings as documented above.