

U.S. NUCLEAR REGULATORY COMMISSION
OFFICE OF INSPECTION AND ENFORCEMENT

REGION III

Report No.: 78-02

Docket No.: 50-182

License No.: R-87

Licensee: Purdue University
Lafayette, IN.

Facility Name: Purdue University Reactor

Inspection At: Purdue University Reactor

Inspection Conducted: August 16-18, 1978

Inspector(s): C. Brown

Approved By: W. S. Little, Chief
Nuclear Support Section 2

Inspection Summary

Inspection on August 16-18, 1978 (Report No. 50-182/78-02)

Areas Inspected: A routine unannounced inspection was performed in the areas of logs and records, audits, requalification training, procedures, surveillance, experiments. The inspection involved 17 inspector-hours onsite by one NRC inspector.

Results: No items of noncompliance or deviations were identified in five areas, and one item of noncompliance in one area; an operator operated the reactor with his license expired.

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DETAILS

1. Persons Contacted

*E. R. Stansberry - Reactor Supervisor
D. Vehar - Reactor Operator
R. H. Johnson - Reactor Operator
E. Merritt - Technician
*F. M. Clikeman - Director, Nuclear Engineering Laboratories

*Denotes those attending the management interview.

2. Logs, Records, and Organization

A review was performed to verify that the logs and records were maintained consistent with regulatory requirements and that the organization complied as outlined in the applicable facility documents and license. The organization was found to be consistent with these documents and requirements and appeared to be functioning satisfactorily. The reactor control manning appeared to have been performed satisfactorily (with the exception noted in paragraph 8) and in accordance with approved procedures. The log review revealed no significant problems had occurred during the inspection period. The required records were found to be available. No items of noncompliance or deviations were identified in this area.

3. Audit and Review

The audit and review function of the facility's CORO was reviewed to verify the conformance with the facility requirements. The review of the CORO minutes indicated that the required reviews were being performed. The minutes are generally the methods used to document the Committee's approval of procedures, both for reactor operation and for experiments, although some of the procedures are dated. The inspector pointed out that with the new procedures in the development stage that the approval date should be included on the procedure. The licensee agreed to review this item. The committee comments appear to have been resolved. No items of noncompliance or deviations were identified in this area.

4. Regualification Training

The regualification training records were reviewed to verify that the program was functioning as required. The records indicated that the training was up-to-date. The file included the tests and the answer key. The individual's records contain documentation of the operational history and operator evaluation. The program contains the review of changes to the facility, if any, and review of the procedures. The scheduled time appears to be sufficient and the program appears to be functioning satisfactorily. No items of noncompliance or deviations were identified in this area.

5. Procedures

The facility procedures were reviewed to verify that adequate control was provided for safety-related operations and that effective procedural control had been implemented. The responsibilities of the operator is established. The procedures were noted to be in the process of updating to conform with the proposed Technical Specifications. Several areas were pointed out as needing more precise guidance, particularly the administrative procedures. The licensee agreed to review these areas. The licensee also agreed to review and develop a system to indicate the latest revision on the procedure. No items of noncompliance or deviations were identified in this area.

6. Surveillance

The review of surveillance records and procedures was performed to verify that the program was conducted within the requirements. The surveillance procedures appear to be technically adequate for the required items. The procedure program is to verify that the procedures are compatible and meet the requirements of the proposed Technical Specifications. The surveillance records indicate that the program has been performed. The internal review also appears to be satisfactory in this area. No items of noncompliance or deviations were identified in this area.

7. Experiments

The experimental records and procedures were reviewed to verify that the experiments were conducted in accordance with the stated requirements. The records indicated the experiments* were performed within the approved conditions. No items of noncompliance or deviations were identified in this area.

*Reactor operated mainly for irradiations and training.

8. Operator Licenses

The review of the operator licenses indicated that all persons operating were properly licensed, with the exception of one operation performed by the Reactor Supervisor after his license expiration date. The licensee thought the renewal forms had been mailed in a timely manner but they had not been received by operator licensing. The licensee mailed another set of renewal forms during the inspection. The licensee stated that the Reactor Supervisor would not perform any functions requiring a licensed operator until his license renewal is received, he will perform as a trainee only on the reactor. The activity performed after the license had expired was the surveillance check of the magnet currents which requires that each rod be

withdrawn 3cm so the rod dropoff may be noted. The log and record review indicated that this was the only licensed function performed. The licensee was informed that this item was considered to be an item of noncompliance (deficiency) with the facility license.

9. Management Interview

A management interview was held with the licensee's representatives (as denoted in paragraph 1) at the conclusion of the inspection and in a subsequent telephone communication. The following items were included in the discussion.

- a. The licensee stated a review of procedure subject and content would be performed using the latest revision of the proposed Technical Specifications as the basis for the areas to be included. (Paragraph 5)
- b. The licensee acknowledged the apparent item of noncompliance. (Paragraph 8).