

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

REGION V

Report No. 50-142/81-02

Docket No. 50-142 License No. R-71 Safeguards Group _____

Licensee: University of California at Los Angeles

Los Angeles, California 90024

Facility Name: UCLA Research Reactor (Argonaut-100KW)

Inspection at: UCLA Campus

Inspection conducted: June 24-26, 1981

Inspectors: T. Young Jr. 7-14-81
T. Young Jr., Reactor Inspector Date Signed

P. Morrill 7-14-81
P. Morrill, Reactor Inspector Date Signed

Approved by: T. Young Jr. 7-14-81
T. Young Jr., Acting Chief Date Signed
Reactor Projects Section 2
Reactor Operations Projects Branch

Summary:

Inspection on June 24-26, 1981 (Report No. 50-142/81-02)

Areas Inspected: Routine, unannounced inspection of licensee's organization, logs and records, review and audit function, requalification training, procedures, calibrations, and experiments. This inspection involved 32 inspector-hours on-site by two NRC inspectors.

Results: No items of noncompliance or deviations were identified.

DETAILS

1. Persons Contacted

- *R. Reyes, Acting Health Physicist
- *N. Ostrander, Manager, Nuclear Energy Laboratory
- *A. Zane, Reactor Supervisor
- W. Parker, Assistant Chief Engineer, Physical Plant
- J. Evraets, UCLA Radiation Safety Officer
- *K. Sime, Reactor Operator

*Denotes those attending the exit interview.

2. Followup of Inspector Identified Items

During inspection 50-142/80-02, it was observed that the licensee's Pre-Startup Check Off Sheet did not fully check the area radiation monitors. The inspector verified that the Prestartup Check Off Sheet was revised to ensure that the Area Radiation Monitors, including the detectors, are verified operable before each Startup. Item 80-02-01 is closed.

The inspector examined the corrective actions taken by the licensee in response to an item of noncompliance identified during inspection 50-142/80-02 which dealt with the lack of an emergency procedure for a dropped rod. The inspector examined the licensee's "Procedures to Delineate Operator Actions," for "Failure of a Reactor Safety System," and for "Uncontrolled Reactivity Changes." The inspector also discussed the item of noncompliance and corrective actions identified in the licensee's letter of March 29, 1980, to verify appropriate corrective actions had been taken. Item 80-02-02 is closed.

During inspection 50-142/80-02, it was observed that the Failed Rabbit procedure was ambiguous in that it did not identify whether or not a cracked rabbit cap was considered a failed rabbit. The inspector examined the licensee's revised failed rabbit procedure to verify that it was more explicit for operators. Item 80-02-03 is closed.

During inspection 50-142/80-02, it was observed that the licensee's surveillance of neutron channels occurred 13 months apart (December 8, 1978 to January 9, 1980) as opposed to the 12 months written in the Technical Specifications. Based on an examination of the licensee's letter response dated March 20, 1980, and followup corrective actions, the inspector concluded that the licensee had taken appropriate corrective actions. Item 80-02-04 is closed.

During inspection 50-142/80-02, it was observed that corrective actions to be taken as a result of the "abnormal occurrence" which took place on December 19, 1973, had not been completed. The inspector verified that the Radiation Use Committee had evaluated and accepted the changes and that these changes (i.e., automatic scram if the linear recorder is turned off, and controls set to drive rod 4 in with attendant audible alarm if any inhibit signal occurs during operation) were completed. Item 80-02-05 is closed.

No items of noncompliance or deviations were identified.

3. Followup on Licensee Reportable Item

An "abnormal occurrence" (as defined by UCLA Technical Specifications) took place on January 20, 1981 (see letter A. Zane to Director, D.O.R., January 26, 1981). The inspector examined the circumstances surrounding the event and corrective actions taken or planned by the licensee. Based on discussions with licensee personnel and examination of appropriate records, the inspector determined that the licensee's corrective actions were adequate and that the reactor was maintained in a safe condition.

No items of noncompliance or deviations were identified.

4. Organization, Logs and Records

Mr. Jack Horner, the former Health Physicist (HP), has left the organization. Mr. Bob Reyes was acting HP at the time of the inspection. Two senior reactor operator license renewals and one reactor operator initial license were granted since the previous inspection.

The records of operations for the period since the last inspection (March, 1980) were examined. These records included the operating procedures, the reactor operator log, pre-startup checklists, and maintenance and calibration logs. The data of the 1980 Annual Report was also confirmed.

No items of noncompliance or deviations were identified.

5. Surveillance

The inspector examined selected surveillance records and discussed these surveillances with licensee personnel. Surveillances examined included: rod worth, rod drop times, shutdown margin, excess reactivity, calibration of neutron instruments, and calibration of primary and secondary flow meters.

The inspector examined the licensee's corrective actions based on a letter response, dated March 20, 1980, to an item of noncompliance identified during inspection 50-142/80-02. This item of noncompliance was based on conducting neutron channel calibrations 13 months apart (December 8, 1979 - January 9, 1981) as opposed to 12 months written in the technical specifications. The inspector concluded that the licensee had taken appropriate corrective actions and observed that the proposed revised Technical Specifications allow a 25 percent (3 month) leeway on performing these surveillances. This item (80-02-04) is closed.

No items of noncompliance or deviations were identified.

6. Experiments

The inspector examined 14 of the current experiments. The experiments are described and reviewed on Experimental Safety Analysis (ESA) forms in accordance with the Technical Specifications. The inspector observed that the licensee has made a change to the ESA form since the last inspection (50-142/80-02). The ESA form now requires an estimate of the reactivity effect of the experiment prior to insertion into the reactor. The inspector also observed that the licensee is reviewing and rewriting ESAs on a yearly basis to keep the experiment log more current.

No items of noncompliance or deviations were identified.

7. Procedures

The inspector performed a review of the technical adequacy of procedures, and of adherence to these procedures by licensed operators. Specifically, the inspector observed a checkout of the facility prior to operation, startup and operation at 100KW.

No items of noncompliance or deviations were identified.

8. Requalification Training

The inspector, through review of records, verified that the requalification program is being performed in accordance with the approved program. Records indicated satisfactory completion of lecture attendance and examinations by all participants. There are also continuous records maintained of each operator's reactivity manipulations indicating that all have been actively engaged as operators or senior operators.

No items of noncompliance or deviations were identified.

9. Review and Audit

The minutes of the Radiation Use Committee (RUC) meetings since the last inspection were reviewed to verify that the RUC review and audit functions are consistent with the requirements of the Technical Specifications. Meetings have been held at the frequency required by the Technical Specifications, and the membership of each meeting satisfied quorum requirements.

No items of noncompliance or deviations were identified.

10. Exit Interview

The inspectors met with the licensee representatives (denoted in paragraph 1) at the conclusion of the inspection on June 26, 1981. The inspectors summarized the scope of the inspection and the findings.