10 CFR 2.790 INFORMATION

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

REGION V

IE Inspection Report No. 50-142/7502 (IE-V-60)

Licensee University of California at Los Angeles — Docket No. 50-142

License No. R-71

Priority F

Facility UCLA — Category 5

Location ~~Los Angeles, California 90024~~

Type of Facility Argonaut Training Reactor

Type of Inspection Announced Physical Security and Materials

Dates of Inspection May 20, 1975

Dates of Previous Inspection None

Principal Inspector M. D. Schuster, Jr. for — 6/3/75
Physical Protection Inspector — Date

Accompanying Inspectors — Date

— Date

Other Accompanying Personnel:

Reviewed by V. N. Rizzolo, Chief — 6/3/75
Materials and Plant Protection Branch — Date

IE-V-43 Copy No. 1

10 CFR 2.790 INFORMATION

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10 CFR 2.790 DESIGNATION

SUMMARY OF FINDINGS

I. Enforcement Action

A. Violations

None

B. Infractions

Contrary to 10CFR73.40 and the licensee's security plan without the required training in the health physics course and testing in health physics and laboratory procedures.

C. Deficiencies

None

II. Licensee Action on Previously Identified Matters

Not applicable

III. Design Changes

Not applicable

IV. Unusual Occurrences

On May 20, 1975 at 1343 hours the alarm for was received by , without prior notification from the reactor supervisor. was dispatched . Investigation revealed that the reactor supervisor, when exiting had not notified . This was observed by the inspector.

V. Other Significant Findings

A.

. This is not recognized in the Security Plan. (See Section VII, Paragraph C.3., Physical Barriers.)

DO NOT MICROFILM

VI. Management Interview

Conducted on May 20, 1975 with Messrs:

Harold V. Brown, Environment, Health and Safety Officer
C. E. Ashbaugh, Reactor Supervisor
Jack Hornor, Resident Health Physicist

The findings of this inspection were discussed and there was no disagreement with the findings or with the item of noncompliance. Mr. Brown agreed to pursue possible solutions

VII. Details

A. Scope

This inspection encompassed physical security and accountabilty of the training reactor located at the University of California at Los Angeles (UCLA) and evaluates compliance with the security plan of August 1974 approved by the Directorate of Licensing on January 8, 1975.

B. Individuals Contacted

Harold V. Brown, Environment, Health and Safety Officer
C. E. Ashbaugh, Reactor Supervisor
John C. Evraets, Radiation Safety Officer
Lt. Jymes Carter, UCLA Police Department
Jack Hornor, Resident Health Physicist

C. Inspection Audit Program

1. Physical Security Plan

The licensee possesses an approved security plan and no changes have been made in the plan which decreases its effectiveness.

2. Security Organization

The security organization as described in the licensee's security plan was verified.

The training received (4 months plus 2 months on-the-job training) by members of this department complies

The licensee's security plan states
are given to qualified individuals who have taken our health physics course, and who have passed the health physics and laboratory procedures test". was issued to without the required testing. This was identified as an infraction.

3. Physical Barriers

The training reactor is located in Room 2567, a north-south wing, connecting the Mathematical Sciences and Boelter Hall buildings. These buildings are centrally located within the UCLA campus.

The physical barriers, e.g., walls, floors, are as described in the licensee's security plan.

4. Access Controls

The licensee controls access by means of escorts, visitor's register, alarms and key control systems.

All visitors are escorted within the protected and vital areas, and required to sign a visitor's register. All doors leading into and within are under a lock and key system : permitted by those keys is shown in Figures 11 and 12 of the licensee's security plan.

are maintained by the Reactor Supervisor

have been designated as security (vital) areas.

5. Alarms, Response and Surveillance

(See also Section IV, Unusual Occurrences.) The location and type of the alarm system described in the licensee's security was verified.

(Two tests were performed by the inspector and one test by the Reactor Supervisor.)

The test was repeated by both the inspector and the Reactor Supervisor, with the same results.

In July 1971 a technical evaluation of this equipment was published by the Technical Branch, Division of Security, AEC. They concluded in part that:

a. Did not meet the requirements of AEC Manual Chapter Appendix 2401, Part III and

b. Interim Federal Specifications W-A-00450A (GSA-FSS).

c. Disapproved its use for AEC installations.

All alarms annunciate in

of essential equipment is performed during working hours by the permanent employees,
during nonworking hours is performed

6. Special Nuclear Material

Fuel for the Argonaut-type research reactor is in the form of aluminum clad ~93% EU-Al alloy fuel plates assembled into MTR type fuel assemblies.

The inventory of special nuclear material is as follows:

	U (G)	U-235 (G)
Fuel -	3,805	3,540
Irradiated -	793	738
Other unused materials	4,909	4,571
	9,507	8,849

In addition to the reactor fuel, the University also possesses two plutonium beryllium neutron sources in conjunction with the operation of the reactor. One source is licensed under the reactor license R-71; the other is licensed under SNM-974. The inventory was as follows:

	Plutonium (G)	Fissile Isotope (G)
Pu-Be Sources	64	60

The bulk of the unused materials noted above, 4,022g U and 3,745g U-235, consists of unused fuel assemblies on hand since 1971 (fabricated by Atomics International).