

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

Region V

Report No. 50-433/79-01 (IE-V-318)
Docket No. 50-433 Licensee No. R-124 Safeguards Group V
Licensee: University of California - Santa Barbara
Department of Chemical and Nuclear Engineering
Santa Barbara, California 93106
Facility Name: Nuclear Reactor Facility
Inspection at: Santa Barbara, California
Inspection Conducted: July 10-12, 1979
Date of Last Material Control and Accounting Inspection Visit: September 20, 1977
Type of Inspection: Routine, Unannounced Physical Security
Inspectors: W. P. Mortensen, Physical Protection Inspector September 9, 1979
Date Signed
L. W. Ivey, Physical Protection Inspector September 5, 1979
Date Signed
Approved by: L. R. Nordershaug, Chief, Safeguards Branch September 3, 1979
Date Signed

Inspection Summary:

Inspection Conducted on July 10-12, 1979 (Report No. 50-433/79-01)
(IE-V-318)

Areas Inspected: Security plan, protection of SNM; security organization; access control; alarm systems; keys, locks and combinations; communications; surveillance; procedures; security program review; and protection against radiological sabotage. The inspection involved 28 inspector-hours onsite by two NRC inspectors and was begun during the regular hours.

Results: Of the eleven areas inspected, no items of noncompliance were identified in eight areas. Six items of noncompliance were identified in three areas: Paragraph 6, Failure to provide certain instructions to guards, deficiency; Paragraph 6, Failure to respond to alarm, infraction; Paragraph 6, Failure to record certain data, deficiency; Paragraph 7, Failure to maintain record, deficiency; Paragraph 7, Inadequate barrier infraction; Paragraph 11, Area not clear, infraction.

DETAILS

1. Key Persons Contacted

*Dr. G. R. Oddette, Vice Chairman, Department of Chemistry and Nuclear Engineering

*Dr. E. Profio, Reactor Director

M. Dinsebacher, Administrative Assistant

J. Balster, Assistant Electrical Engineer

L. Wilkens, Architect, U.C. Santa Barbara

The inspectors briefly interviewed other employees of the licensee, including members of the campus police department, physics faculty and students, and other members of the campus facilities management group.

*Denotes those attending exit briefing.

2. Licensee Action on Previous Inspection Findings

a. (Open) Noncompliance, 50-433/77-03: Failure to promptly rekey locks [REDACTED] - The inspector was informed that the licensee has promptly rekeyed locks [REDACTED] Interviews with licensee employees apparently verifies door keying has been promptly changed [REDACTED] An individual having access [REDACTED]

[REDACTED] however, as discussed in Paragraph 8, the system is currently being modified. The licensee agreed during the exit interview to notify NRC, Region V, upon completion of installation and rekeying which would be accomplished expeditiously.

B. (Open) Noncompliance, 50-433/77-03: Distribution of more keys than permitted by the security plan. - The security plan limits the licensee [REDACTED]

[REDACTED]

3. Exit Interview

On July 12, 1979, at the conclusion of the inspection, the inspectors met with those individuals denoted in Paragraph 1. The inspectors stated the scope and findings of the inspection. The licensee made no commitments as to corrective action concerning items of noncompliance which were identified except for the following:

- a. The licensee committed to notify the Region V office upon installation and rekeying of new locking hardware for the alarm system, and to expeditiously accomplish the task in meeting the security plan commitment for "promptly" rekeying. (79-01-08)
- b. The licensee stated they would review methods to obtain better communication between the Chemistry and Nuclear Engineering Department, the campus police department, and the facilities management group in meeting commitments made to the NRC. (79-01-09)

4. MC 81405B - Security Plan

No items of noncompliance were noted. The security plan was submitted by letter dated March 5, 1974, and revised May 5, 1975 and September 8, 1977. It was approved by letter from NRR, Division of Reactor Licensing, dated July 31, 1975 and constitutes the approved security plan. The inspectors reviewed the security plan and examined the physical barriers at the reactor facility

[REDACTED] The licensee prior to the implementation of changes reviewed the changes in accordance with the requirements of 10 CFR 50.54(p) and determined the changes did not decrease the security of the facility.

[REDACTED] The changes to the barrier at the reactor facility commenced in late May 1979 and were completed in early July 1979. The licensee notified the Nuclear Regulatory Commission of the changes by letter dated June 15, 1979. Attachment 10 is a copy of the letter from the licensee to NRC on notification of changes to the facility.

5. MC 81410B - Protection of SNM

No items of noncompliance were identified.

[REDACTED]

6. MC 81415B - Security Organization

Three items of noncompliance were identified.

a. Through interview of

b. A test of the alarm systems and the police response capability was conducted in cooperation with a licensee representative on July 11, 1979. At 1:37 p.m. the inspectors tripped the alarm

It had been determined by the inspectors earlier on July 11, 1979,

The licensee's approved security plan, Paragraph 1.2.3 states in part,

Paragraph 2.2 of the licensee's approved security plan states in part,

c. On July 12, 1979, the inspectors requested

The licensee's approved security plan, Paragraph 1.1 states in part,

The finding by inspectors that the licensee

7. MC 81420B - Access Controls

Two items of noncompliance were identified.

- a. The inspectors examined the licensee's log of visitors to the nuclear reactor facility. The log is jointly used for recording dosimeter readings to meet health physics requirements. In normal use, the log contains the name of the individual, citizenship, date of entry, time of entry and exit, and dosimeter reading entering and upon exit.

Two dates examined by the inspectors in which these types of entries exist occurred on October 13, 1978 and April 21, 1979 among others.

The licensee's approved security plan, Paragraph 1.2.2 states in part,

The finding by the inspectors

- b. On June 15, 1979, the licensee notified NRC of barrier structural modifications (enclosure 10). The inspectors examined the new wall structure for adequacy in providing security for the reactor facility.

Paragraph 1.2.1 of the licensee's approved security plan states in part,

Paragraph 2.2 of the approved security plan states in part,

The finding by the inspectors

8. MC 81425B - Alarm Systems

No items of noncompliance were identified. The licensee has

9. MC 81430B - Keys, Locks and Combinations

No items of noncompliance were identified. The licensee

The licensee states

10. MC 81435B - Communications

No items of noncompliance were identified.

11. MC 81440B - Surveillance

One item of noncompliance was identified. The licensee's approved security plan, Paragraph 1.2.3 states in part,

The inspectors observed on July 10, 1979,

12. MC 81445B - Procedures

No items of noncompliance were identified. Through review of licensee procedures on July 11, 1979, the inspectors determined the licensee has procedures for responding to bomb threats and acts of civil disorder.

13. MC 81450B - Security Program Review

No items of noncompliance were identified. The last security program review by the licensee was conducted in accordance with the security plan and was documented. Minutes of the review made by the Reactor Operations Committee are attached as enclosure 8.

Paragraph 1.1 of the approved security plan states in part,

Paragraph 1.1 also states

It was noted by the inspectors that

interviewed at the time of the inspection were not aware of the modifications that had taken place at the nuclear facility or that an entrance to the reactor facility had changed.

14. MC 81455B - Protection Against Radiological Sabotage

No items of noncompliance were identified. Protection against sabotage is of concern to the licensee and is primarily affected by the security consciousness of the reactor personnel and adherence to established procedures and policies.

15. Attachments

8. Minutes of the Reactor Operations Committee Semiannual Meeting dated April 6, 1979
9. Memorandum from Edward Profio to Dean John Myers dated September 3, 1978
10. Letter, dated June 15, 1979 to NRC

~~CONFIDENTIAL~~

April 6, 1979

MINUTES OF THE REACTOR OPERATIONS COMMITTEE SEMIANNUAL MEETING

Present: A.E. Profio (Reactor Director), G.R. Odette, F.E. Gallagher III, G.E. Lucas, H. Gurol
Absent: H.J. Fenech

1. The demonstration against nuclear power scheduled for 2 p.m. today near the reactor facility was discussed. It was decided that the situation would be nonviolent and well in hand and no further action was required.
2. The preliminary plans for the modifications

It was

decided that the modifications were within the license intent but any modification would have to be reviewed by the NRC as a license amendment. The Reactor Director will send a drawing and construction plan to NRC for informal opinion, as soon as the drawing is available from UCSB Facilities Management.

3. Possible revisions to the Emergency Plan and Procedures were discussed. It was decided that the Reactor Director should prepare a more realistic assessment of the doses that might be experienced in event of an accident,

Also the procedures for notification of any radiation leakage, and possible evacuation, should be reassessed

4. The quarterly audit subcommittee (Fenech and Gallagher) recommended that the number of key sets, giving access to

This would improve speed of response to a radiation emergency and allow evaluation of the situation (including whether it was a real or false alarm) when the [] are not immediately available to respond. The ROC approved this change and a license amendment will be filed with NRC along with the building alterations.

~~CONFIDENTIAL~~

A. E. Profio
A.E. Profio
Reactor Director

September 3, 1978

TO: Dear John Myers
FROM: Edward Profio
RE:

[REDACTED]

One of the physics personnel left unlocked after work on Friday, September 1.

About 10:30 pm Friday, some unknown person walked into the room, setting off the intrusion alarm.

Prof. Rollin Morrison of the physics department was telephoned but he did not have the key. He directed the police officer to search a room on the fifth floor, but the key could not be found. There was a note on the north door, signed by "Neal" to the effect that the keys were put away.

I was telephoned at home, reported within 15 minutes, checked the room which appeared to be ok, locked the door, and waited until the police officer reset the intrusion alarm.

The keys will be changed on Tuesday, September 5. The Nuclear Regulatory Commission wants us to keep keys to the minimum. However, I would suggest that

can be secured until I can arrive to check the facility.

If the physics worker had forgotten to energize the intrusion alarm, the door could have remained unlocked over the Labor Day weekend, or something worse could have happened.

The Nuclear Regulatory Commission might revoke the reactor license if repeated violations such as this occur. It is also possible that they could fine the university, or responsible individuals, up to \$5,000 a day according to the new regulations.

The physics people should be warned to have a responsible employee (not the casual workers they hire) check the door and alarm, and institute a better method of key control if they intend to continue

Edward Profio

cc: Dale Seberg ✓
Bob Carter

[REDACTED]



DAVID S. SAXON
President of the University

OFFICE OF THE CHANCELLOR
SANTA BARBARA, CALIFORNIA 93106

ROBERT A. HUTTENBACK
Chancellor of Santa Barbara



June 15, 1979

U.S. Nuclear Regulatory Commission
Washington DC 20555

Docket No. 50-433
Facility License R-124 UCSB L-77 Training Reactor

Gentlemen:

Enclosed is a report on alterations to the reactor facility at UCSB. It should be treated as confidential.

The proposed alterations were reviewed by the Reactor Operations Committee. Because the alterations were in the direction of improved security, it was decided that prior approval by the NRC was not necessary. The alterations are now in progress and should be completed by July 31, 1979.

The Physical Security Plan is being revised to reflect the alterations as well as modifications in access and key control since the activities of the reactor staff and students are now separated from the activities of the High Energy Physics Group.

Sincerely,

Robert J. Kroes
Associate Vice Chancellor,
Administrative Services
and Student Affairs



Enclosures



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5/5

~~7906200344~~ 2pp.

May 22, 1979

REPORT ON ALTERATIONS TO UCSB L-77 TRAINING REACTOR FACILITY

A. E. Profio
A.E. Profio
Reactor Director