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DEPARTMENT OF CHEMISTRY

IRVINE, CALIFORNIA 92717

June 1, 1982

U. S. Nuclear Regulatory Commission  
Division of Human Factors Safety  
Operator Licensing Branch  
Washington, D. C. 20555

Gentlemen:

Please find enclosed a report on a security incident submitted in response to Federal Regulations 10CFR 73.71(c). The report attempts to detail the occurrence of the loss of security effectiveness, the responses made, and our efforts to revise systems and procedures to reduce the chance of a recurrence.

We are aware that this report is late by the criteria necessary for report of moderate loss of effectiveness which has not been compensated for. As noted below, we feel that there are mitigating circumstances in this case which lead to uncertainty as to how much compensation is required to fall into the non-reportable category.

We wish to point out the following important items:

1. All evidence shows that there have been no breaches of security, no unauthorized activities and no threat whatsoever of material diversion.
2. All material at this facility is less than [REDACTED] While such elements do not necessarily meet the "self-protecting criteria" as defined by NRC, they are all highly radioactive, and not handleable with safety or without detection by radiation monitoring equipment.
3. The present authorized security plan for the facility was submitted in July, 1974, following requests for changes in the plan from NRC in June, 1974. This plan does [REDACTED] described under "surveillance" section.

10 CFR 2.700-1.50 [REDACTED]

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4. A revised security plan was submitted to NRC on April 27th, 1981. Additional comments were submitted on June 30th, 1981 in response to a request from NRC dated June 19th, 1981. No response has been received from NRC since that date, with the exception of a brief telephone request from Carol Rossomondo regarding clarification of personnel qualifications for admittance to the facility. This latter was in May, 1982.
5. On the advice of Region V NRC personnel, and under the guideline that we were increasing the level of security, we proceeded with installation of the hardware and [redacted] aspects of the revised security plan, and these have been substantially completed for some time. We have not completed documentation of procedures, nor any formal retraining of personnel for the new plan, pending further revision.
6. In response to a perceived difficulty with the new plan, emphasized by this incident, we are proceeding to make additional changes - further increasing the level of security. These changes will necessitate minor revisions in the new security plan. These revisions are being prepared and will be submitted to NRC very shortly. These changes address the issue of system reliability, "compensation" for loss of system effectiveness, and improve the communication beyond the current level.
7. We believe our present system already exceeds the requirements for a low strategic significance facility as given in 73.67 (a).
8. The incident has identified the need for changes in some of our procedures in implementation of the new plan. Some of these are detailed in the attachment.

We submit this report in the belief that the major difficulties with operation of security at our facility, pointed out by this incident, have been identified and are being addressed so as to minimize the probability of a similar incident occurring.

At the time of submitting this report, security is back at the level existing prior to the incident.

In our discussions, we have chosen to focus on improvements to be made. The history of the incident is discussed only as it relates to identification of problems with security operations, since no actual security breach occurred.

[redacted]

Sincerely yours,

*Signed F.S.R.*

F. S. Rowland  
Reactor Administrator

*Signed G.E.M.*

G. E. Miller  
Reactor Supervisor

UCI TRIGA Nuclear Reactor Facility  
Security Incident Report. Period 4/1/82-6/1/82  
Report Date 6/2/82

Description of event.

On approximately April 1st, problems developed with the [redacted] dispatch point. These problems resulted in removal of the unit for service a few days' later.

On the week-end of May 1st, the Reactor Supervisor became aware that the [redacted] was not in operation, and began preliminary contact with the [redacted] on Monday, May 3rd. By Thursday, May 6th, the [redacted] supervisor had been made aware that [redacted]

On Monday, May 10th, now that matters locally were in order, the Reactor Supervisor called NRC to report the possible moderate loss of security effectiveness as a historical event.

The [redacted] was placed back in service sometime around May 25th and proper checks conducted as to communications between the systems.

The security [redacted] at the facility had, all this time, kept complete track of all events - entries, exits, movement, radiation alarm occurrences, etc. The system has to be manually reset following any untoward incident. No manual resets were needed in this period. All fuel elements in inventory were still in place in the [redacted]. Thus no actual security breach had occurred or had been attempted.

Discussion.

Problems had been occurring with the [redacted] system for a while, but all had been quickly resolved ( false alarms, etc). As far as facility staff is aware, no attempt was made to inform the facility that the system was to be removed from service for repair, and no [redacted] were initiated prior to May 6th.

Personnel at the facility enter and leave on a frequent, but random basis. A complete record of all access and realarm functions, by date and time, is recorded on a [redacted]

[redacted] All data does exist for 4/27-6/1/82. It would be possible to "wade" through this log and record every time period that the facility was unoccupied. This exercise is clearly not worth it since no security breach occurred.

Further Actions.

The following actions have been taken or are being planned. A brief analysis of the reason for each action is also included here.

1. Installation of a [redacted] unit has commenced. This unit will, on the receipt of a signal from the [redacted] line. The unit will also [redacted]

( [REDACTED] )  
Further actions (continued)

Since the [REDACTED] was not described as part of our new plan, a plan revision is being prepared for submittal as soon as possible to cover this. It is our intent that both systems [REDACTED] should remain in operation when possible. In the event of failure of one or the other, reporting capability would be maintained. [REDACTED] would be initiated only if both units fail.

2. A procedure for more frequent checking [REDACTED] of the communications link [REDACTED] is being prepared and will be implemented as soon as possible. The exact frequency is still under discussion, but would not be less frequently than [REDACTED]. In the interim, [REDACTED] will be made.
3. A procedure for recycling of [REDACTED] output on a basis such that records for at least [REDACTED] can be researched has been established.
4. A request has been made for setting up discussions with the [REDACTED] with the aim of initiating personnel training sessions at which the full new plan will be implemented. Such procedures will include the need for adequate reporting of trouble with systems and for implementation of [REDACTED] as soon as system difficulties are identified. We aim to carry out a complete review of all procedures relevant to the new plan. It will be helpful if we can finalize this plan and assume that new revisions will not be imminent, except at our initiative.

As noted, we are of the opinion that these actions will greatly reduce the chance of a recurrence of this situation. We hope to have all phases of these improvements implemented within 30 days.

G.E. Miller, Reactor Supervisor  
Department of Chemistry

[REDACTED]