

DEC 22 1989

Docket No. 50-326

University of California  
Irvine, California 92717

Attention: Executive Vice Chancellor  
Chang-Lin Tien

Gentlemen:

SUBJECT: UC IRVINE REPLY TO NOTICE OF VIOLATION

Thank you for your letter dated October 25, 1989, in response to our Notice of Violation and Inspection Report No. 50-326/89-02, dated September 27, 1989, informing us of the steps you have taken to correct the items which we brought to your attention.

The Notice of Violation issued to you contained a citation in section C.2 for failure to conduct an annual operating test. In reply to this citation you commented that the reactor supervisor and other reactor operators are in close collaboration regarding operation, scheduling, maintenance, safety and all operational issues and hence operators are often under direct assessment, but documentation of the contact is weak or non-existent. Your proposed action is to implement a diary of reactor operator meetings, discussions, and observations of performance. Each operator will share responsibilities for entries, although it will be the Supervisor's responsibility for upkeep of the diary.

The NRC does not consider your reply to meet the intent of the requirement for an annual operating test. However, a diary system similar to that proposed by you could meet this requirement if properly applied. Following is an example of an acceptable approach.

At the beginning of each requalification cycle, the Reactor Supervisor must conduct an annual review of the training areas he intends to cover with each operator. The review must ensure the training the Reactor Supervisor intends to administer includes weaknesses noted during the previous cycle for that operator, as well as a comprehensive sampling of the applicable items listed in 10 CFR 55.45(a)(1) through (13). A diary methodology used for documenting these evaluations could be implemented, as long as the performance of the items are observed by the reactor supervisor. At the end of the cycle, a review should be conducted to ensure the areas intended to be covered in training, particularly the applicable 10 CFR 55.45(a) items, were indeed performed. If the prescribed areas were not covered, there should be a mechanism for conducting a final evaluation to cover those missing topic areas.

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We request that you amend your response to item C.2 of the Notice of Violation to commit to the above stated position for administering operating tests or provide equivalent methods to assure the adequate administration of annual operating tests. Your reply should be submitted within 30 days of the date of this letter.

*original signed*

Ross A. Scarano, Director  
Division of Radiation Safety and  
Safeguards

cc w/copy of letter dated 10/25/89:  
Dr. George E. Miller, Reactor Supervisor  
Department of Chemistry  
University of California, Irvine  
Irvine, California 92717

bcc w/copy of letter dated 10/25/89:  
docket file  
State of California  
A. Johnson  
B. Faulkenberry  
J. Martin  
J. Zollicoffer  
L. Miller

bcc w/o copy of letter dated 10/25/89:  
M. Smith

REGION V/10/25/89 *AT*  
AJohnson *zsa* GYuhas *for* FWenslawski *zsa* RAScarano *[signature]*  
12/21/89 12/21/89 12/21/89 12/ /89

REQUEST COPY	REQUEST COPY	REQUEST COPY	REQUEST COPY
YES / NO	YES / NO	YES / NO	YES / NO

SEND TO PDR
YES / NO



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EXECUTIVE VICE CHANCELLOR  
IRVINE, CALIFORNIA 92717

October 25th, 1989

U.S. Nuclear Regulatory Commission, Region V,  
1450 Maria Lane, Suite 210,  
Walnut Creek, CA 94596

Attention: Director Ross A. Scarano

Docket 50-326  
License R-116Re: Reply to a Notice of Violation dated September 27th, 1989

Gentlemen:

With respect to the referenced Notice of Violation we respond as follows:

**Item A.** "Reactor operations continued even though none of the Operator Monthly Maintenance checklists had been reviewed for the period August through December 1988."

## (1) Comment:

As noted in remarks to the inspector this was an oversight on the part of the Reactor Supervisor and Assistant Reactor Supervisor, even though all maintenance items had been completed on schedule, and such a report made orally to the administrative staff.

## (2) Corrective steps:

The reactor daily start-up checklist has been modified to require reactor operators to verify the completion and sign off of appropriate checklists prior to any daily operation. This has been implemented.

## (3) Further action:

Future operator training and requalification discussions will include reference to the importance of sign-off on documentation and additional review of necessary conditions for continued operation. The staff, and the Reactor Operations Committee will study possible revision of the Operating Procedures so that single review may be all that is needed to assure compliance.

## (4) Full Compliance:

Compliance with existing procedures is considered to have been accomplished.

**Item B.** "The Reactor Operations Committee failed to meet during the period August 19, 1988, to January 30, 1989."

## (1) Comment:

This item was reported to NRC by letter dated May 5th, 1989. The reasons and the corrective action were described in the letter. A copy is attached for your information.

## (2) Corrective steps:

The steps taken are described in the attached letter.

## (3) Further action:

No further action is planned, except for consideration being given to requesting an amendment to this Technical Specification item to reduce the frequency of required meetings.

## (4) Full Compliance:

Compliance with existing requirements is considered to have been accomplished.

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**Item C.a.** "Contrary to the above requirement the licensee did not document additional training provided to a senior reactor operator who scored less than 80% on two sections of the 1988 requalification examination."

(1)Comment:

In his detailed report on this item (Inspection Report, page 7, line 20), the inspector noted: "The Reactor Supervisor stated that the two sections of the examination were discussed with the SRO as compensatory training. " This fact was documented by a note made on the front cover of the senior operator's examination script maintained in the files as "Reviewed with PJR". The operator's initials are PJR. At the time this was felt to be both sufficient training and documentation.

(2)Corrective steps:

This issue has been noted by the Reactor Supervisor, who acts as the training and requalification director. Future records will be made clearer.

(3)Further action:

None contemplated.

(4)Full Compliance:

This issue did not arise with the 1989 requalification, where all scores were satisfactory. The difference may have been because of a deliberate effort to make the examination even more "performance based".

**Item C.b.** "Contrary to the above requirement the Reactor Supervisor did not conduct an operating test for evaluating operators or senior operators during the period of 1988 and 1989 to the date of the inspection."

(1)Comment:

At this facility there have only been two licensed senior operators and one licensed operator during the period since 1987. One of the senior operators is the Reactor Supervisor, and the other acts as Assistant Reactor Supervisor. All three individuals are in close collaboration regarding operation, scheduling, maintenance, safety and all operational issues. Thus the other operators are often under direct assessment by the Reactor Supervisor and there has never been any question of their competence to operate the reactor safely. However, documentation of this contact is weak or non-existent.

(2)Corrective steps:

None taken at this time.

(3)Future Actions:

The Reactor Supervisor as training coordinator will implement a diary of reactor operator **meetings, discussions, and observations of performance** for each licensed individual. Each operator will share responsibility for entries, although it will clearly be the Supervisor's responsibility for the upkeep of this diary. This log should provide the necessary documentation for ongoing requalification. In addition, the Reactor Operations Committee will discuss the possibility of applying for a license amendment to obtain permission for a more flexible requalification program better suited to the needs of our facility than that imposed by NRC in 1974.

(4)Full Compliance:

The diary system should be fully implemented by the end of this year (December 31st, 1989). We hope this will satisfy full compliance as facility and department resources do not permit provision of additional full coursework for operators. Changes in the program will take much longer to be drafted and approved.

**Additional Item:**

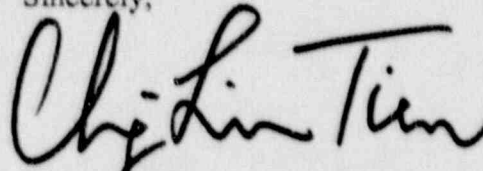
Your notice of transmittal asks for comments on "the level of management attention necessary to assure continued safe operations". We are pleased that you agree that such matters "do not represent a significant safety concern at this time". We comment as follows:

The Chemistry Department and the School of Physical Sciences are currently reviewing the staffing situation at the facility. There had been a plan to combine a position of reactor operator and reactor health physicist, with other chemistry departmental duties, into a full-time staff position. The individual in mind for this position is no longer available. Whether to pursue this or some other model of improving paid staffing at the facility is currently under review.

In the meantime, the Reactor Supervisor has made a commitment to assign additional hours of his time to facility management and operations. He and the Assistant Reactor Supervisor are discussing reassignment of certain tasks between them to provide more assurance of timely documentation.

It is anticipated that plans will be firm by January, 1990. Meanwhile, the facility will continue to be operated safely under existing arrangements, but with closer attention to details of documentation, which appear to be the major issue for concern. Review by outside individuals from E,H&S will also pay closer attention to details of documentation. They will be assisted in this task by newly created audit checklists.

Sincerely,

A handwritten signature in black ink, reading "Chang-Lin Tien". The signature is fluid and cursive, with the first name "Chang" and last name "Tien" clearly distinguishable.

Chang-Lin Tien,  
Executive Vice-Chancellor

cc: H.W. Moore, Dean, Physical Sciences  
M.C. Caserio, Chair, Chemistry  
V.P. Guinn, Chair, Reactor Operations Committee  
F.S. Rowland, Reactor Administrator  
G.E. Miller, Reactor Supervisor

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SANTA BARBARA • SANTA CRUZ

DEPARTMENT OF CHEMISTRY  
NUCLEAR REACTOR FACILITY  
SUPERVISOR: DR. G.E. MILLER  
TEL: (714) 856-6649 OR 714-856-6082

IRVINE, CALIFORNIA 92717

May 5th, 1989

U.S. Nuclear Regulatory Commission,  
Region V,  
1450 Maria Lane, Suite 210,  
Walnut Creek, CA 94596

Docket: 55-326  
Licensee report of violation.

Gentlemen:

I have to inform you that the Reactor Operations Committee(ROC) for the UCI Nuclear Reactor Facility failed to meet in the period August 18th, 1988 to January 31st, 1989, in violation of the requirements in the Technical Specifications that the Committee shall meet at least quarterly.

Thus the fall quarter was missed. In 1988 there were three regular meetings (February 18th, May 20th, and August 18th). In addition there were special meetings of staff before, on, and after May 23rd, when an emergency exercise was conducted, and on January 31st, 1989 for a complete review of the Emergency Plan.

The reasons were:

- (a) routine operations were discontinued between December 13th and January 18th because of a combination of staff reduction, staff illness, and the need to carry out additional maintenance at a time when maintenance staff external to the facility were unavailable. A December meeting that had been scheduled was thus postponed.
- (b) difficulties with the unavailability of secretarial assistance.

These problems have been resolved. Special maintenance has now been completed and routine maintenance conducted on schedule. The Reactor Supervisor now has a new secretarial assistant who will be able to deal with reactor paperwork once her training period on other department matters is complete. Committee meetings have been held on schedule - January 31st, March 14th, and planned for May 11th, 1989 - to review operations, emergency response plans and maintenance.

It is important to emphasize that continual surveillance on behalf of the ROC has been maintained by the personnel of the Office of Environmental Health and Safety, who have reviewed both performance and records at the facility involving not only safety matters, but also operations and general maintenance. The results of their reviews have been given to the Reactor Supervisor on a number of occasions and resulted in small corrective actions. The Committee is satisfied that the facility has continued to operate with proper regard for the health and safety of the public in spite of the absence of a formal meeting, and no hazard has resulted, nor has the likelihood of hazard been increased.

Sincerely,

*G. E. Miller*

George E. Miller  
Reactor Supervisor

cc: Reactor Operations Committee members

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