

UNITED STATES NUCLEAR REGULATORY COMMISSION REGION II 101 MARIETTA STREET, N.W. ATLANTA, GEO®GIA 30323

SEP 1 4 1988

Report No.: 50-62/88-02

Licensee: University of Virginia

Charlottesville, VA 22901

Docket No.: 50-62

License No.: R-66

Facility Name: University of Virginia

Inspection Conducted: August 9-11, 1988

Inspector: Charle & Beland

Date Signed

9/13/88

Approved by: Thomas R Diaku

Thomas R. Decker, Section Chief

Division of Radiation Safety and Safeguards

SUMMARY

Scope: This routine, announced inspection of the emergency preparedness program was conducted in the areas of emergency facilities and equipment, training, performance of drills, offsite agency support, and maintenance of the Emergency Plan and Implementing Procedures.

Results: In the areas inspected, three violations (Paragraphs 4, 5 and 6) were identified. The licensee's Plan and Implementing Procedures provide a good foundation for an effective Emergency Response Program; however, more management attention is needed to ensure adequate implementation and maintenance.

REPORT DETAILS

1. Persons Contacted

Licensee Employees

*P. Benneche, Reactor Supervisor/Supervisor of Services

B. Copcutt, Radiation Safety Officer

*J. Farrar, Reactor Administrator/Supervisor Operations

O. Hale, Reactor Health Physicist

A. Jackson, Radiation Safety Specialist

*R. Mulder, Reactor Facility Director

Other Organizations

J. Chance, Emergency Room Services, University of Virginia Medical Center M. Sheffield, Director, University of Virginia Police

*Attended Exit Interview

2. Emergency Facilities and Equipment (82745)

The inspector selectively examined emergency kits/equipment. The two formal kits, one located on the first floor and the other on the ground floor, included first aid supplies, decontamination supplies, SCBAs, dosimetry, radiation monitoring instruments and protective clothing. Additional equipment was available from Environmental Health and Safety and the Health Physics Lab. The equipment appeared adequate to support a radiological emergency.

The inspector reviewed the licensee's program for inventorying and maintaining emergency equipment. Documentation for the period August 1987 to present, indicated that emergency kits were maintained in accordance with Section 8.6 of the Emergency Plan. Other areas examined included eye wash stations, fire extinquishers, emergency showers, SCBAs, walkie talkies, and the rauio to the University of Virginia Police. An operability test of the radio was conducted with no problems observed.

No violations or deviations were identified.

3. Maintenance of Emergency Plan and Procedures (82745)

This area was reviewed to determine whether changes were made to the program since the last inspection (May 1987), and to note how these changes affected the overall state of emergency preparedness.

During the period of June 1987 to August 1988, several revisions were made to the Emergency Plan Implementing Procedures. These revisions were primarily administrative in nature and were determined not to decrease the

effectiveness of the Plan. The most significant change was the deletion of the accountability roster from EPIP-11, "Personnel Accountability." This roster is now being maintained as a separate document with current copies located in the Office of the Reactor Supervisor, Operations, and on the badge/accountability boards. This change was made in response to a Headquarters concern that personnel names and telephone numbers should not be submitted to NRC for placement in the Public Document Room. The new roster appeared current and well maintained.

Submittal of changes to the NRC were also evaluated as well as distribution of changes to appropriate onsite personnel and offsite agencies. Review of licensee documentation showed that Revisions 7, 8, and 9 of the EPIPs were transmitted to the NRC within 30 days as required. Also, examination of several internal copies of the Plan and Procedures indicated revisions had been distributed as appropriate. No discrepancies were noted.

The inspector reviewed licensee documentation to determine that the licensee had performed a bi-annual review of the Emergency Plan as required. This documentation indicated that a review of the Plan had been conducted on June 28, 1988, by the Reactor Safety Committee. In addition, on May 14, 1986, a review of the Emergency Procedures was conducted; however, preliminary evaluation indicated that it did not meet the requirements of Section 10.4 of the Emergency Plan. This failure to perform a bi-annual audit of the Plan was identified to the licensee as a potential violation at the exit interview. After further examination, however, the May 1986 audit does appear to be sufficient in scope to meet the intent of the bi-annual Reactor Safety Committee review. The licensee was notified of this on August 29, 1988.

No violations or deviations were identified.

Emergency Response Training (82745)

The inspector reviewed Section 10.1 of the Emergency Plan which described the training program for reactor facility personnel. The training for these individuals was to include at least two classroom training sessions and practical drills yearly.

Review of the licensee's training records for the period October 1986 thru July 1988, and discussions with licensee representatives revealed that four personnel who have responsibility for implementing the Plan had not been trained as required. Specifically, these individuals had not received any specialized Emergency Plan training since October 1986. The emergency positions filled by these personnel included Emergency Director, Emergency Coordinator, and Reactor Health Physicist. Interviews conducted with three of the staff members revealed that they understood their emergency roles and were cognizant of the areas of the Emergency Plan and Procedures they would be expected to implement. Although no major impediments were identified during the walk-through evaluation, the

failure to provide training to emergency personnel in accordance with the Emergency Plan was identified to the licensee as a violation.

Violation 50-62/88-02-01: Failure to provide emergency response training in accordance with Section 10.1 of the Emergency Plan.

In addition to the training program for emergency responders, the inspector also review the licensee's general Emergency Plan training for all personnel granted unescorted access to the reactor facility. A video tape had been established for this purpose and included instruction on general responsibilities during an emergency, evacuation, accountability and emergency contacts. All personnel were required to take a written examination, and retraining was provided as appropriate.

The inspector reviewed the licensee's program for maintaining an onsite capability in first aid. At the time of the inspection, only one staff member was qualified in Red Cross Multi-media First Aid. Until January 1988, the licensee had maintained two permanent staff members trained in first aid; however, since departure of one of these qualified individuals, no training has been initiated to replace this expertise. In the response to the 1985 Emergency Response Appraisal dated November 7, 1985, the licensee stated that more than one staff member was qualified in first aid. Contrary to this, the licensee had not maintained at least two qualified staff members for the period January 1988 to present. Licensee representatives indicated that first aid training was being scheduled for the fall. Although this item is not being cited as a deviation as stated at the exit interview, followup action on the first aid training program will be reviewed during a future inspection.

IFI 50-62/88-02-02: Maintaining more than one staff member trained in first aid measures.

One violation was identified.

5. Emergency Drills and Exercises (82745)

The inspector reviewed the licensee's program for performing periodic drills and exercises to test the implementation of the Emergency Plan and Implementing Procedures. This program included the performance of an annual onsite drill, a bi-annual drill involving coordination with offsite agencies, and semi-annual evacuation drills.

Discussion with licensee representatives and review of documentation indicated that the last biannual drill was conducted in October 1986. This drill included response by the entire emergency organization to a predetermined scenario with participation by the local fire department, rescue squad and hospital. The drill was critiqued and corrective action was taken as appropriate. The next bi-annual exercise is to be conducted in the fall of 1988.

Since October 1986, only one other drill had been performed. This drill, conducted in November 1987, consisted of the sounding of the evacuation alarm and implementation of the Emergency Plan and Procedures involving evacuation and accountability. Documentation showed the drill duration to be approximately ten (10) minutes. Discussion with licensee representatives indicated that this drill was conducted to meet the annual, onsite drill requirements; however, the licensee was informed that the annual drill should fully exercise the integrated emergency response organization including response management, operations, and health physics such that all emergency functions are tested.

Inspector Followup Item (IFI) 50-62/88-02-03: Upgrade annual drill scope to include an integrated response by the emergency organization to a predetermined scenario of events.

In addition, the inspector reviewed the licensee's program for conducting evacuation drills. This program was described in Section 8.4.2.c of the Emergency Plan which required that the evacuation horn be sounded every six months to include a check of the facility to ensure that all personnel had evacuated (accountability). Discussion with licensee representatives and review of documentation revealed that only two such drills had been performed since October 1986; one during the October 1986 drill and the other in November 1987. The licensee further indicated that prior to October 1986, semi-annual evacuation drills had been performed; however, the inspector did not review this documentation.

Violation 50-62/88-02-04: Failure to Perform Semi-Annual Evacuation Drills in Accordance with Section 8.4.2.c of the Emergency Plan.

One violation was identified.

6. Offsite Support Agencies and Training (82745)

The inspector held discussions with licensee representatives regarding the coordination of emergency planning with offsite agencies. Written Letters of Agreement existed with the Charlottesville-Albemarle Rescue Squad, Albemarle County Police, Charlottesville Fire Department, University of Virginia Police, University of Virginia Environmental Health and Safety, University of Virginia Hospital, Virginia State Police, Virginia Department of Emergency Services and Oak Ridge/Department of Energy, as specified in the Emergency Plan. The Letters of Agreement on file were obtained in the fall of 1985, and had not been updated to date. Documentation dated August 4, 1988, showed that all support agencies were contacted and requested to provide current agreement letters. However, Section 3 to Appendix 4 of the Emergency Plan states that Letters of Agreement will be sought prior to the bi-annual Emergency Plan review. This failure to update the agreement letters in accordance with the Emergency Plan was identified as a violation.

Violation 50-62/88-02-05: Failure to Update Letters of Agreement in Accordance with the Requirements of the Emergency Plan.

It should also be noted that in a letter from R. Mulder to D. Verrelli dated November 7, 1985, the licensee stated that Letters of Agreement would be updated every two years beginning this fall (1985). This review cycle is inconsistent with that stated in the Plan; however, a 1987 update was not performed either resulting in the Letters of Agreement being three years old.

The inspector determined through discussions and review of records that the licensee had provided recent training and/or tours of the facility to the University of Virginia Police, University of Virginia Hospital, and Pegasis Rescue Squad. In addition, numerous invitations had been extended to the Charlottesville-Albemarle Rescue Squad for training; however, they have not accepted. Other than that noted above, no other specific Emergency Plan training had been provided to offsite groups since January 1986. It should be noted that the Fire Department, Hospital, and Rescue Squad participated in the October 1986 full-scale drill. In addition, the licensee sent invitations to all support agencies on August 4, 1988, requesting that they participate in training.

One violation was identified.

7. Action on Previous Inspection Findings (92701)

- a. (Closed) Inspector Followup Item (IFI) 50-62/85-02-02: Upgrade the training for rescue squad members to include a description of the University of Virginia emergency organization. Discussions with licensee representatives and a review of pertinent documentation indicated that the rescue squad was requested to participate in training and a facility tour on numerous occasions, specifically in letters dated September 1985, June 1987, October 1987, and August 1988. Although the rescue squad has participated in onsite drills, they have not been responsive to other invitations for emergency response training.
- b. (Closed) IFI 50-62/87-01-01: Completion of formal documentation on the emergency response training program. The inspector reviewed documentation for a recent training session that was conducted on July 22, 1988. A complete outline of the lecture content was on file and available.
- c. (Closed) IFI 50-62/87-01-02: Submittal of changes to the Emergency Plan and Implementing Procedures in accordance with 10 CFR 50.4(b)(5) and Section 10.4 of the Emergency Plan. The inspector reviewed the documentation for Revisions 7, 8, and 9 to the Emergency Plan Implementing Procedures and found that submittals to the NRC were made as required.

8. Exit Interview

The inspection scope and results were summarized on August 11, 1988, with those persons indicated in Paragraph 1. The inspector described the areas

inspected and discussed in detail the inspection findings listed below. The licensee did not identify as proprietary any of the material provided to or reviewed by the inspector. Dissenting comments were not received from the licensee.

Item Number	Description and Discussion
50-62/88-22-01	Violation - Failure to provide emergency response training in accordance with Section 10.1 of the Emergency Plan, Paragraph 4.
50-62/88-22-02	IFI - Maintaining more than one staff member trained in first aid measures, Paragraph 4.
50-62/88-22-03	IFI - Upgrade annual drill scope to include an integrated response by the emergency organization, Paragraph 5.
50-62/88-22-04	Violation - Failure to perform semiannual evacuation drills in accordance with Section 8.4.2.c of the Plan, Paragraph 5.
50-62/88-22-05	Violation - Failure to update Letters of Agreement in accordance with the Plan requirements, Paragraph 6.

Licensee management was informed that the three IFIs discussed in Paragraph 7 were considered closed.