



UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION II
101 MARIETTA STREET, N.W.
ATLANTA, GEORGIA 30303

Report No. 50-124/79-5

Licensee: Virginia Polytechnic Institute and State University
Blacksburg, Virginia 24060

Facility Name: VPI Argonaut Research Reactor

Docket Nos. 50-124

License No. R-62

Inspection at VPI Argonaut Research Reactor

Inspector: *G. T. Gibson* 5/10/79
G. T. Gibson Date Signed

Approved by: *J. W. Hufham* 6/7/79
J. W. Hufham, Section Chief, FF&MS Branch Date Signed

SUMMARY

Inspection on March 28-29, 1979.

Areas Inspected

This routine unannounced inspection involved 12 inspector-hours onsite in the areas of emergency planning including: emergency plans and procedures; emergency equipment; review of offsite agency support; and review of drills and exercises.

Results

Of the four areas inspected, no apparent items of noncompliance or deviations were identified.

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DETAILS

1. Persons Contacted

Licensee Employees

- *Dr. A. Krebs, Vice President for Administration
- *Dr. A. K. Furr, Professor Engineering Department
- R. T. Stone, Reactor Operator
- R. D. Mogle, Health Physicist
- G. Knight, Reactor Operator
- A. P. Curtner, Reactor Operator
- *Dr. T. Parkinson, Director, VPI Research Reactor

Other licensee employees contacted included two technicians and one operator.

*Attended exit interview.

2. Exit Interview

The inspection scope and findings were summarized on March 29, 1979 with those persons indicated in Paragraph 1 above.

3. Licensee Action on Previous Inspection Findings

No previous inspection findings were within the scope of this inspection.

4. Unresolved Items

Unresolved items are matters about which more information is required to determine whether they are acceptable or may involve noncompliance or deviations. One new unresolved item identified during this inspection is discussed in Section 7.a.

5. Emergency Drills

The inspector examined licensee records of emergency planning drills and exercises. The inspector noted the drill frequency specified in the emergency procedures had been met for the period January 1978 through March 1979. No substantive deficiencies or recommendations were identified by these exercises.

6. Emergency Plans and Procedures

- a. The inspector examined the licensee's emergency planning procedures. The inspector noted the procedures were reviewed and approved in

accordance with administrative requirements of the Technical Specifications. The inspector discussed with licensee personnel the content of these procedures, and was informed that more comprehensive procedures were being prepared. This item will be examined further during a subsequent inspection (124-79-05-01).

- b. The inspector discussed the licensee's liaison with the Commonwealth of Virginia, Bureau of Radiological Health, Division of Hazards Control, and the Virginia Disaster Preparedness Plan. The inspector was informed the licensee considered that the Commonwealth of Virginia had not completely integrated the VPI reactor into the emergency planning for the State. Moreover, licensee representatives indicated they felt "left out" inasmuch as the State had not included them in or furnished them with a copy of the State plan. The inspector stated he would request from the State that a copy be sent to VPI.

7. Source Term Instrumentation

- a. The inspector reviewed the licensee's radiological effluent (stack and ventilation) monitoring instrumentation relating to quantification of source-term information (Curies released or Ci/sec release rate). The inspector discussed with licensee representatives how their current system relates to the recently issued Commonwealth of Virginia Radiological Emergency Plan requirements on the reporting of source term information. In addition, the inspector discussed the operating requirements for effluent monitors as specified in the recently issued NRC Regulatory Guide 2.6, "Emergency Planning for Research Reactors." The inspector noted the licensee's current monitoring system cannot be used to quantify unplanned releases, and consequently, is unable to provide vital information required by the Commonwealth of Virginia. This item shall be considered an unresolved item (124-79-05-02).
- b. The inspector discussed this matter (124-79-05-02) with the Vice President for Administration, Virginia Polytechnic Institute. As discussed, the licensee stated the following activities would be made immediately relating to the quantification of source-term information:
 - (1) The licensee shall immediately evaluate the current monitoring system and determine what appropriate modifications and/or additions are required to provide source-term information consistent with the Commonwealth of Virginia requirements and NRC Regulatory Guide 2.6 recommendations.

- (2) The licensee shall notify the NRC by May 1, 1979, of the proposed modifications/additions and their estimated completion date(s).
- (3) The licensee will immediately install a strip chart recorder on the current stack monitor to indicate and record the duration of unplanned releases.

8. Equipment and Supplies

- a. The inspector examined selected licensee emergency equipment kept in emergency lockers. The inspector found, for the kits examined, that the inventory was complete, although one kit had a malfunctioning radiation survey instrument.
- b. The inspector examined licensee first aid equipment and supplies. The inspector noted the first aid equipment to be for general first aid. A stretcher and some crisis equipment was available.
- c. The inspector toured the reactor cell and observed licensee monitors for fire and radioactivity. The inspector also observed the rabbit-system in operation. No significant items relating to personnel safety or housekeeping were observed.