

UNITED STATES NUCLEAR REGULATORY COMMISSION  
NOTICE OF FINDING OF NO SIGNIFICANT ENVIRONMENTAL IMPACT  
REGARDING PROPOSED AMENDMENT TO  
FACILITY OPERATING LICENSE NO. R-123  
UNIVERSITY OF VIRGINIA  
DOCKET NO. 50-396

The Nuclear Regulatory Commission (the Commission) is considering issuance of an amendment to Facility Operating License No. R-123 for the University of Virginia CAVALIER training reactor located on the campus in Charlottesville, Virginia.

The amendment will renew the Operating License for a period of twenty years from its date of issuance, in accordance with the licensee's application dated June 22, 1984, as supplemented. Opportunity for hearing was afforded by the Notice of Proposed Renewal of Facility License published in the Federal Register on August 2, 1984, at 49 FR 31017, as corrected August 15, 1984 at 49 FR 32696. No request for hearing or petition for leave to intervene was filed following notice of the proposed action.

Continued operation of the reactor will not require alteration of buildings or structures, will not lead to changes in effluents released from the facility to the environment, will not increase the probability or consequences of accidents, and will not involve any unresolved issues concerning alternative uses of available resources. Based on the foregoing and on the Environmental Assessment, the Commission concludes that renewal of the license will not result in any significant environmental impacts.

Finding of No Significant Impact

The Commission has prepared an Environmental Assessment, dated May 1, 1985, for this action and has concluded that it will not have a significant effect on the quality of the human environment. Therefore, the Commission has determined not to prepare an Environmental Impact Statement for the proposed action.

Summary of Environmental Impacts As Described in the Environmental Assessment

The proposed action would authorize the licensee to continue operating the reactor in the same manner that it has been operated since 1974. The environmental impacts associated with the continued operation of the facility are discussed in an Environmental Assessment associated with this action. The Assessment concluded that continued operation of the University of Virginia CAVALIER training reactor for an additional twenty years will not result in any significant environmental impacts on air, water, land or biota in the area, and that an Environmental Impact Statement need not be prepared. These conclusions were based on the following:

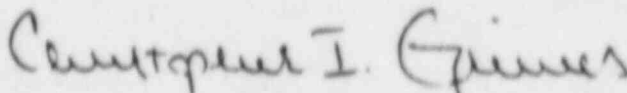
- a) the excess reactivity available under the technical specifications is insufficient to support a reactor transient generating enough energy to cause overheating of the fuel or loss of integrity of the cladding;
- b) even after prolonged operation at a power level of 100 watts, the inventory of fission products in the fuel cannot generate sufficient radioactive decay heat to cause fuel damage even in the hypothetical event of instantaneous total loss of coolant, and
- c) the hypothetical loss of integrity of a fueled experiment will not lead to radiation exposures in the unrestricted environment that exceed the guideline values of 10 CFR 20.

For further details with respect to this proposed action, see the application for license renewal dated June 22, 1984, as supplemented, the Environmental Assessment, and the Safety Evaluation Report prepared by the staff (NUREG-1119). These documents and this Notice of Finding of No Significant Environmental Impact are available for public inspection at the Commission's Public Document Room, 1717 H Street NW, Washington, D. C. 20555. Copies may be obtained upon request addressed to the U.S. Nuclear Regulatory Commission, Washington, D.C. 20555, ATTENTION: Director, Division of Licensing.

Copies of NUREG-1119 may be purchased by calling (301) 492-9530 or by writing to the Publication Services Section, Document Management Branch, Division of Technical Information and Document Control, U. S. Nuclear Regulatory Commission, Washington, D. C. 20555; or purchased from the National Technical Information Service, Department of Commerce, 5285 Port Royal Road, Springfield, Virginia 22161.

Dated at Bethesda, Maryland, this 10th day of May 1985.

FOR THE NUCLEAR REGULATORY COMMISSION



Christopher I. Grimes, Acting Assistant  
Director for Safety Assessment  
Division of Licensing