

November 9, 1995

Dr. Robert U. Mulder, Director  
University of Virginia Reactor Facility  
Department of Mechanical, Aerospace  
and Nuclear Engineering  
University of Virginia  
Charlottesville, Virginia 22903-2442

SUBJECT: ISSUANCE OF AMENDMENT NO. 22 TO AMENDED FACILITY OPERATING  
LICENSE NO. R-66 - UNIVERSITY OF VIRGINIA (TAC NO. M93809)

Dear Dr. Mulder:

This letter is in response to your letter of October 10, 1995, as supplemented on October 19 and 26, 1995, that requested NRC review of your updated safety analysis report on leak analysis and repair of your heat exchanger. As part of that review, the Commission has issued the enclosed Amendment No. 22 to Amended Facility Operating License No. R-66 for the University of Virginia Research Reactor. The amendment consists of a change to the Technical Specifications (TS) in response to your submittals.

The NRC staff has determined that your safety analysis of heat exchanger leakage assumed conservative leak scenarios and that your radiological assessment was also conservative. The NRC staff agrees with your safety analysis results that show that releases to the environment from a heat exchanger leak would be within the limits of 10 CFR Part 20. The NRC staff has also reviewed your proposed design of a plug to seal heat exchanger tubes that are leaking and has concluded that the use of these plugs is acceptable.

The amendment adds a requirement to the TS for surveillance of activity in the secondary cooling system water.

A copy of the related Safety Evaluation supporting the changes to your Safety Analysis Report and Amendment No. 22 is also enclosed.

Sincerely,

ORIGINAL SIGNED BY  
Alexander Adams, Jr., Senior Project Manager  
Non-Power Reactors and Decommissioning  
Project Directorate  
Division of Reactor Program Management  
Office of Nuclear Reactor Regulation

Docket No. 50-62

Enclosures:

- 1. Amendment No. 22
- 2. Safety Evaluation

cc w/enclosures: See next page

DISTRIBUTION:

Docket File 50-62  
EHylton  
GHill (2)  
OPA

PUBLIC  
AAdams  
CGrimes  
OC/LFDCB

PDND r/f  
OGC  
CBassett, R-II  
Region II

PDND:LA  
EHylton  
11/3/95

PDND:PM  
AAdams  
11/5/95

OGC  
CBassett  
11/19/95

PDND:D  
Sweiss  
11/9/95

OFFICIAL RECORD COPY  
DOCUMENT NAME: G:\SECY\ADAMS\AMEND22

9511150137 951109  
PDR ADOCK 05000062  
P PDR

NRC FILE CENTER COPY *DFD*



UNITED STATES  
NUCLEAR REGULATORY COMMISSION

WASHINGTON, D.C. 20555-0001

November 9, 1995

Dr. Robert U. Mulder, Director  
University of Virginia Reactor Facility  
Department of Mechanical, Aerospace  
and Nuclear Engineering  
University of Virginia  
Charlottesville, Virginia 22903-2442

SUBJECT: ISSUANCE OF AMENDMENT NO. 22 TO AMENDED FACILITY OPERATING  
LICENSE NO. R-66 - UNIVERSITY OF VIRGINIA (TAC NO. M93809)

Dear Dr. Mulder:

This letter is in response to your letter of October 10, 1995, as supplemented on October 19 and 26, 1995, that requested NRC review of your updated safety analysis report on leak analysis and repair of your heat exchanger. As part of that review, the Commission has issued the enclosed Amendment No. 22 to Amended Facility Operating License No. R-66 for the University of Virginia Research Reactor. The amendment consists of a change to the Technical Specifications (TS) in response to your submittals.

The NRC staff has determined that your safety analysis of heat exchanger leakage assumed conservative leak scenarios and that your radiological assessment was also conservative. The NRC staff agrees with your safety analysis results that show that releases to the environment from a heat exchanger leak would be within the limits of 10 CFR Part 20. The NRC staff has also reviewed your proposed design of a plug to seal heat exchanger tubes that are leaking and has concluded that the use of these plugs is acceptable.

The amendment adds a requirement to the TS for surveillance of activity in the secondary cooling system water.

A copy of the related Safety Evaluation supporting the changes to your Safety Analysis Report and Amendment No. 22 is also enclosed.

Sincerely,

A handwritten signature in cursive script, appearing to read "Alexander Adams, Jr.", written in dark ink.

Alexander Adams, Jr., Senior Project Manager  
Non-Power Reactors and Decommissioning  
Project Directorate  
Division of Reactor Program Management  
Office of Nuclear Reactor Regulation

Docket No. 50-62

Enclosures:

1. Amendment No. 22
2. Safety Evaluation

cc w/enclosures: See next page

University of Virginia

Docket Nos. 50-62/396

cc:

Commonwealth of Virginia  
Council on the Environment  
903 Ninth Street Office Bldg.  
Richmond, Virginia 23219

Mr. Preston Farrar  
Nuclear Reactor Facility  
School of Engineering  
and Applied Science  
University of Virginia  
Charlottesville, Virginia 22903

Dr. Ronald D. Flack, Jr., Chairman  
Department of Mechanical, Aerospace  
and Nuclear Engineering  
University of Virginia  
Charlottesville, Virginia 22903

Dr. William Vernetson  
Director of Nuclear Facilities  
Department of Nuclear Engineering  
Sciences  
University of Florida  
202 Nuclear Sciences Center  
Gainesville, Florida 32611

Dr. Ratib A. Karam, Director  
Neely Nuclear Research Center  
Georgia Institute of Technology  
900 Atlantic Drive, N.W.  
Atlanta, Georgia 30332

Mr. Pedro B. Perez, Associate Director  
Nuclear Reactor Program  
North Carolina State University  
P. O. Box 7909  
Raleigh, North Carolina 27695-7909

Office of the Attorney General  
101 North 8th Street  
Richmond, Virginia 23219

Bureau of Radiological Health  
Division of Health Hazards Control  
109 Governor Street, Room 916  
Richmond, Virginia 23219