

October 16, 1995

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

SUBJECT: REQUEST FOR ADDITIONAL INFORMATION (TAC NO. M93809)

Dear Dr. Mulder:

We are continuing our review of your amendment request for the Safety Analysis Report of Facility Operating License No. R-66 for the University of Virginia Research Reactor which you submitted on October 10, 1995. During our review of your amendment request, questions have arisen for which we require additional information and clarification. Please provide responses to the enclosed request for additional information within 30 days of the date of this letter. In accordance with 10 CFR 50.30(b), your response must be executed in a signed original under oath or affirmation. Following receipt of the additional information, we will continue our evaluation of your amendment request.

This requirement affects nine or fewer respondents and, therefore, is not subject to Office of Management and Budget review under P.L. 96-511.

If you have any questions regarding this review, please contact me at (301) 415-1127.

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

Enclosure:  
As stated

cc w/enclosures:  
See next page

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UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

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Sincerely,

A handwritten signature in cursive script that reads "Alexander Adams, Jr.".

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

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See next page

University of Virginia

Docket Nos. 50-62/396

cc:

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Richmond, Virginia 23219

REQUEST FOR ADDITIONAL INFORMATION  
UNIVERSITY OF VIRGINIA RESEARCH REACTOR  
DOCKET NO. 50-62

1. Page 4-7-A, Section 4.6.1, Paragraph 1, line 3:

Your discussion is limited to replacements only. Do you want this discussion to also apply to repairs and modifications? If so, please propose amended wording for this section.

2. Page 4-7-A, Section 4.6.1, Paragraph 2, line 5:

A 50.59 analysis is broader than a determination of the capability of a structure, system, or component to perform their intended functions. Please justify your wording in light of the requirements of 50.59(a)(?) or propose amended wording for this section.

3. Page 4-8, Table 4.1:

Does the use of the word current in the title of Table 4.1 mean that the information in the table represents the condition of the heat exchanger today or is the information in this table design specifications? Please clarify.

4. Page 4-8-A, Table 4.1.A, "Surveillance interval":

Your table does not place a definite upper limit on the number of plugs that may be installed in the heat exchanger. Since additional heat exchanger tube plugging may be necessary in the future, please justify your surveillance of the removal and inspection of one plug from the longest installed group of plugs annually or propose a surveillance based on inspecting periodically a sample whose number is a fraction of the total installed plugs. Also, please discuss the practice of removing plugs for inspection as opposed to visually confirming the condition of installed plugs and verifying plug torque. Please justify why this surveillance should not be in the technical specifications or propose a technical specification for plug surveillance that includes the surveillance to be performed and the maximum interval between surveillances.

5. Page 9-73, Section 9.19, line 5-6:

The monitoring of secondary pressures on the heat exchanger input and outlet are important following plug insertion. Your SAR states that pressures shall be monitored without discussing monitoring frequency. Please discuss your monitoring plans for a period of sufficient length after plug installation to confirm that heat exchanger working pressures are not exceeded.

ENCLOSURE

6. Page 9-77, Section 9.20:

Your analysis assumes a 1 ml/sec leak rate for ten days. Is this the combination of leak rate and staff discovery time that will result in the maximum consequence to the public? If not, please analyze the combination of leak rate and staff discovery time that results in the maximum impact on the public.

7. Page 9-79, Section 9.20.5 and Page 9-85, Section 9.20.7.4:

Please discuss the feasibility of analyzing (leak rate and radionuclide analysis) cooling tower water on an accelerated basis for several weeks following reactor restart after plugging heat exchanger tubes to confirm proper plug performance. You propose the measurement in the long-term of secondary coolant samples for activity weekly. Please propose a technical specification for this surveillance that contains the surveillance to be performed and the maximum interval for the surveillance or justify not including this type of surveillance in your technical specifications.