

December 19, 1995

Mr. Mark L. Moore  
Reactor Facility Director  
Armed Forces Radiobiology  
Research Institute  
8901 Wisconsin Avenue  
Bethesda, Maryland 20889-5603

SUBJECT: RESPONSE TO AFFRI COMMENTS ON NRC DRAFT DOCUMENTS

Dear Mr. Moore:

By letter dated February 23, 1995, you provided comments on the Introduction and Chapters 1 and 9 of the draft "Format and Content for Applications for the Licensing of Non-Power Reactors" and "Standard Review Plan and Acceptance Criteria for Applications for the Licensing of Non-Power Reactors." You also indicated that you reviewed but had no comments on Chapters 6 and 8. Thank you for taking the time and effort to review our draft documents. The enclosure to this letter is our analysis of your comments and changes made to the drafts as a result of your comments.

If you have any questions concerning our effort on these documents, 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 Manager  
Office of Nuclear Reactor Regulation

Docket No. 50-170

Enclosure:  
As stated

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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, 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 Manager  
Office of Nuclear Reactor Regulation

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Armed Forces Radiobiology Research  
Institute

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Director, Maryland Office of  
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301 West Preston Street  
Baltimore, Maryland 21201

County Executive  
Montgomery County Government  
Rockville, Maryland 20850

Reactor Facility Director  
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8901 Wisconsin Avenue  
Bethesda, Maryland 20889-5603

NRC response to AFFRI comments - Introduction

Comment - Format and content, "Physical Specifications of the Application," page viii. The draft format and content states to specify measurements in both SI and English units. You commented that this requirement is unnecessarily burdensome. Many existing plant drawings and diagrams are in one system or another, to invest the time and manpower to convert them solely for the purpose of SAR submittal is a waste of resources. You suggested that the licensee use one system or the other for individual drawings or diagrams, as applicable.

NRC response - The trend in the U.S. Government is towards the use of metric (SI) units. Based on your comment we will change the document to request that facilities designed in English units include metric equivalents but that facilities designed in metric units do not need to give equivalent English units. Existing drawings or diagrams in English units need not be converted to metric units. The paragraph on units will be changed to read:

Specify measurements in the units used for the design of the facility. If the facility was designed in English units, the measurements should be given in English units first, followed by the SI (System International or metric) units numerical equivalent in parentheses. Drawings and diagrams in English units need not be changed to add SI units. If the facility was designed in SI units, only the SI units need to be given.

Comment - Review plan, page iv. The text references that Appendix A of this document is an example of a NRC Evaluation Report. You commented that no such example document was found in the material received for review. You suggested that we forward a copy of the example document to the licensee.

NRC response - The staff has decided to delete this appendix because the NRC Evaluation Reports available for reference at this time are not written following the new guidance and as an example would serve no purpose. The staff will consider adding an example of an Evaluation Report to the document at a later date.

NRC response to AFFRI comment - Chapter 1, General Description of the Facility

Comment - Review plan, section 1.4.3. The draft review plan states that the reviewer should assess the effect of the shared facilities on safety. You commented that the task of the licensee in describing the interactions of multiple facilities depends on the exact definition of "shared facilities." You suggested that the concept of "shared facilities" should be very explicitly defined, with consideration of the implications of this definition on SAR analysis and review.

NRC response - The format and content document gives examples to assist the licensee and the NRC reviewer to understand what a shared facility is. The following will be added to section 1.4.1 of the review plan:

Additional guidance on what constitutes a shared facility is discussed in the format and content guidance.

## NRC response to AFFRI comments - Chapter 9, Auxiliary Systems

Comment - Format and content section 9.4, Fire Protection Systems and Programs, page 9-4. The document states that the applicant should discuss how the facility meets all local building and fire codes. You commented that there is no practical way to demonstrate, in the SAR, that the facility meets "all local building and fire codes." The facility had to meet the codes in existence when the facility was originally constructed, and then comply with periodic inspections. However, satisfactory inspections are not documented, only violations or noncompliance. The proposed general requirement to demonstrate compliance with "all local building and fire codes" is impractical. You suggested that we delete the general statement for the applicant to demonstrate compliance with "all local building and fire codes."

NRC response - Your comment is noted and wording will be added to the section to provide additional flexibility for facilities in discussing local codes. Local codes are referenced in the document as a method for showing NRC that a facility meets an acceptable level of fire protection. If local codes are not used as a measure of the soundness of facility design and practice in the area of fire protection, than an alternative would have to be found. One alternative would be for NRC to develop specific criteria for fire protection systems at non-power reactors. Another alternative would be for an applicant or licensee to present and justify their own design criteria for fire protection systems. We believe that alternatives such as these would be cumbersome on NRC and the licensees without significantly enhancing fire protection over following local codes. The following wording will be added to the first paragraph of section 9.4 of the format and content:

For a new facility this could be a general discussion of how the facility meets local fire and building codes. Documentation from the local authority that authorizes the construction could be submitted as part of the discussion. NRC construction inspectors would observe design features for fire protection during facility construction. For existing facilities requesting license renewal where original construction documentation may be difficult to reproduce, the licensee could submit the results of a recent fire inspection to show compliance with local codes.

Comment - Review plan, section 9.3.1., Handling and Storage of Reactor Fuel, page 9-5. The document states that the NRC will review systems, components, and methods used to prepare and ship fuel offsite in accordance with applicable regulations. You commented that the applicant will have difficulty furnishing suitable material for review. There is currently no authorized shipping cask for TRIGA fuel, and no specific destination to which fuel may be shipped. You suggested that we modify the text of this section to recognize that specifics on the systems, components, and methods for preparing and shipping fuel offsite may not be available.

NRC response - Your comment is noted and the following is added to section 9.3.1 of the review plan:

The reviewer should note that the applicant may be discussing events many years in the future and that some degree of uncertainty may exist.