

June 23, 2010

Colonel Mark A. Melanson, PhD, Director  
Armed Forces Radiobiology Research Institute  
8901 Wisconsin Avenue  
Bethesda, Maryland 20889-5603

SUBJECT: ARMED FORCES RADIOBIOLOGY RESEARCH INSTITUTE – REQUEST FOR  
ADDITIONAL INFORMATION REGARDING FINANCIAL QUALIFICATIONS  
FOR THE LICENSE RENEWAL REVIEW (TAC NO. ME1587)

Dear Colonel Melanson:

The U.S. Nuclear Regulatory Commission (NRC) is continuing its review of your application for the renewal of Facility Operating License No. R-84 for the Armed Forces Radiobiology Research Institute TRIGA reactor, dated June 24, 2004 and supplemented by additional information March 4, 2010 (a redacted version of the safety analysis report and supplemental information is available on the NRC's public Web site at [www.nrc.gov](http://www.nrc.gov) under Agencywide Documents Access and Management System Accession Nos. ML101650415 and ML101650422).

We require additional information and clarification on questions that have arisen during our review. Please provide responses to the enclosed request for additional information within 60 days of the date of this letter. In accordance with Title 10 of the *Code of Federal Regulations* (10 CFR) 50.30(b), you must execute your response in a signed original document under oath or affirmation.

If you have any questions about this review or if you need additional time to respond to this request, please contact me by telephone at 301-415-1127 or by electronic mail at [Alexander.Adams@nrc.gov](mailto:Alexander.Adams@nrc.gov).

Sincerely,

*/RA/*

Alexander Adams, Jr., Senior Project Manager  
Research and Test Reactors Licensing Branch  
Division of Policy and Rulemaking  
Office of Nuclear Reactor Regulation

Docket No. 50-170

Enclosure:  
As stated

cc w/encl: See next page

Armed Forces Radiobiology Research

Docket No. 50-170

cc:

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Baltimore, MD 21201

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Reactor Facility Director  
Armed Force Radiobiology  
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8901 Wisconsin Avenue  
Bethesda, MD 20889-5603

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Test, Research, and Training  
Reactor Newsletter  
University of Florida  
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Gainesville, FL 32611

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As stated

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\*concurrence by e-mail

NRR-088

Office	PRLB:PM*	PRLB:LA	PFAB:FA	PRLB:BC	PRLB:PM
Name	WMeyer	GLappert	JSimpson	JQuichocho	AAdams
Date	6/15/10	6/16/2010	6/18/2010	6/21/2010	6/23/2010

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**OFFICE OF NUCLEAR REACTOR REGULATION**

**REQUEST FOR ADDITIONAL INFORMATION**

**REGARDING THE FINANCIAL QUALIFICATIONS FOR THE RENEWED LICENSE FOR**

**THE ARMED FORCES RADIOBIOLOGICAL RESEARCH INSTITUTE**

**TRIGA REACTOR FACILITY**

**LICENSE NO. R-84; DOCKET NO. 50-170**

As required by Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.33(f)(2), “[a]pplicants to renew or extend the term of an operating license for a non-power reactor shall include the financial information that is required in an application for an initial license.” To comply with this requirement, please provide the following updated and supplemental information to the June 24, 2004, Armed Forces Radiobiological Research Institute (AFRRI, the applicant) application (the application) for a renewed license for the AFRRI TRIGA reactor facility.

1. The staff will analyze AFRRI’s financial statements for the current year, which are required by 10 CFR 50.71(b), to determine if the applicant is financially qualified to operate the AFRRI TRIGA reactor facility. Since AFRRI’s financial statements are not included in the application, please provide a copy of the latest financial statements for the staff’s review.
2. As required by 10 CFR 50.33(d)(2), “The applicant shall submit estimates for total annual operating costs for each of the first five years of operation of the facility.” Since the information provided in the 2004 submittal is now out of date, please provide the following additional information:
  - (a) The estimated operating costs for the AFRRI TRIGA reactor facility for each of the fiscal years (FYs) 2012 thru FY2016 (the first five-year period after the projected license renewal date).
  - (b) Confirm that AFRRI’s primary source of funding to cover the operating costs for the above fiscal years will be from the “...Congressional appropriations process as further delegated within the Department of Defense” as stated in the application.
3. The application indicates that the cost to decommission the AFRRI TRIGA reactor facility was \$13,300,000 in 2004 dollars. In order for the U. S. Nuclear Regulatory Commission (NRC) staff to complete its review of the decommissioning cost estimate, please provide the following information:
  - (a) A current cost estimate (2011 dollars) for the AFRRI TRIGA reactor facility to meet the NRC’s radiological release criteria for decommissioning the facility for unrestricted use to comply with 10 CFR 50.75(d)(2). Accordingly, describe the

ENCLOSURE

basis on how the cost estimate was developed, show costs specifically broken down into the categories of labor, waste disposal, other items (such as energy, equipment, and supplies), and include a contingency factor of at least 25%.

- (b) A description of the means of adjusting the cost estimate and associated funding level periodically over the life of the facility, to comply with 10 CFR 50.75(d)(2)(iii).

Since the application does not provide this information, please update the application to include a full description of the method to be used as the means of adjusting the cost estimate and associated funding level periodically over the life of the facility.

- (c) A numerical example showing how the 2011 decommissioning cost estimate will be updated periodically in the future to comply with 50.75(d)(2)(iii).

- 4. The application indicates that “[t]he source of funding to cover decommissioning of the reactor would be a supplemental Congressional appropriation requested when necessary.” Where the applicant intends to use a statement of intent (SOI) as the method to provide decommissioning funding assurance, as provided for by 10 CFR 50.75(e)(1)(iv), the staff must find that the applicant “...is a Federal, State, or local government licensee...” To make this finding, the applicant must state that it is a Federal government organization and that the decommissioning funding obligations of the applicant are backed by the Federal government, and also provide corroborating documentation. Further, the applicant must provide documentation verifying that the signator of the SOI is authorized to execute said document that binds the applicant. This document may be a governing body resolution, management directives, or other form that provides an equivalent level of assurance. As the application does not include all of the above information, please submit the following:

- (a) An updated SOI, which includes: the date of submittal of the SOI; the current cost (2010 dollars) estimate for decommissioning; a statement that funds for decommissioning will be obtained when necessary; typed name and title of the signator, and original signature of the signator; and the signator’s oath or affirmation attesting to the information.
- (b) Documentation that corroborates the statement in the application that AFRRRI is Federal agency and a Federal government licensee under 10 CFR 50.75(e)(2)(iv).
- (c) A statement as to whether the decommissioning funding obligations for the AFRRRI TRIGA reactor facility are backed by the Federal government. The application must also present information that corroborates this statement. For example, the documentation may be a copy of or complete citation to a state statute that expressly provides that the obligations, or at least the decommissioning funding obligations, of the applicant are obligations backed or supported by the full faith and credit of the Federal government, or an opinion of the applicant’s General Counsel with citations to statutes, regulations, and/or case law that the obligations, or at least with respect to the decommissioning

funding obligations, of the applicant are obligations backed or supported by the full faith and credit of the Federal government.

- (d) Documentation verifying that the signator of the SOI is authorized to execute such a document that binds the applicant financially. For example, provide a copy of an official AFRRRI delegation of authority showing that the signator of the SOI is authorized to bind AFRRRI financially, at least with respect to funding the decommissioning of the AFRRRI TRIGA reactor facility.