

March 9, 2018

Dr. Timothy Koeth, Director
Nuclear Reactor and Radiation Facilities
University of Maryland
Department of Materials Science
and Engineering
4418 Stadium Drive
College Park, MD 20742-2115

SUBJECT: UNIVERSITY OF MARYLAND – SUPPLEMENTAL INFORMATION NEEDED FOR ACCEPTANCE OF REQUESTED LICENSING ACTION RE: REQUEST FOR LICENSE AMENDMENT AUTHORIZING CHANGES TO TECHNICAL SPECIFICATIONS FOR THE USE OF 16 ADDITIONAL TRAINING REACTOR AND ISOTOPES PRODUCTION, GENERAL ATOMICS FUEL ELEMENTS IN THE MARYLAND UNIVERSITY TRAINING REACTOR (CAC NO. A11010/05000166-L-2018-LLA-0037)

Dear Dr. Koeth:

By letter dated January 29, 2018 (Agencywide Documents Access and Management System Accession No. ML18032A096), the University of Maryland submitted a license amendment request (LAR) for Maryland University Training Reactor. The proposed LAR would allow for the addition of 16 lightly used training reactor and isotopes production, General Atomics (TRIGA) fuel elements into the current 93-element core.

The purpose of this letter is to provide the results of the U.S. Nuclear Regulatory Commission (NRC) staff's acceptance review of this amendment request. The acceptance review was performed to determine if there is sufficient technical information in scope and depth to allow the NRC staff to complete its detailed technical review. The acceptance review is also intended to identify whether the application has any readily apparent information insufficiencies in its satisfaction of the regulatory requirements or the characterization of the licensing basis for the facility.

Consistent with Section 50.90, "Application for amendment of license, construction permit, or early site permit," of Title 10 of the *Code of Federal Regulations* (10 CFR), whenever a holder of a license desires to amend the license, an application for an amendment must be filed with the Commission, as specified in 10 CFR 50.4, "Written communications," fully describing the changes desired, and following as far as applicable, the form prescribed for original applications. Section 50.34, "Contents of applications; technical information," of 10 CFR addresses the content of technical information required. This section stipulates that the submittal address the design and operating characteristics, unusual or novel design features, and principal safety considerations.

The NRC staff has reviewed the University of Maryland's application and concluded that the information delineated in the enclosure to this letter is necessary to enable the staff to make an

independent assessment regarding the acceptability of the proposed LAR in terms of meeting regulatory requirements and protecting the public health and safety and the environment. In order to make the application complete, the NRC staff requests that the University of Maryland either supplement the application to address the information needs described in the enclosure by March 30, 2018, or withdraw and resubmit the application at a later date. This supplemental information will enable the NRC staff to begin its detailed technical review. If the information responsive to the NRC staff's information needs is not received by the above date, the application, if not withdrawn, will not be accepted for review pursuant to 10 CFR 2.101, "Filing of application," and the NRC will cease its review activities associated with the application. If the application is subsequently accepted for review, the University of Maryland will be advised of any further information needed to support the NRC staff's detailed technical review by separate correspondence.

The information needs and associated response time frame in this letter was discussed with Amber Johnson of the University of Maryland staff on February 28, 2018.

If you have any questions, please contact me at 301-415-4103 or by electronic mail at Linh.Tran@nrc.gov.

Sincerely

/RA Michael Balazik for/

Linh N. Tran, Senior Project Manager
Research and Test Reactors Licensing Branch
Division of Licensing Projects
Office of Nuclear Reactor Regulation

Docket No. 50-166

Enclosure:
As stated

cc: See next page

University of Maryland

Docket No. 50-166

cc:

Director, Maryland Department
of Natural Resources
Power Plant Research Program
Tawes State Office Building
Annapolis, MD 21401

Roland Fletcher, Manager
Radiological Health Program
Maryland Department of the Environment
1800 Washington Blvd., Suite 750
Baltimore, MD 21230

Amber Johnson, Associate Director
Nuclear Reactor and Radiation Facilities
University of Maryland
Department of Materials Science
and Engineering
4418 Stadium Drive
College Park, MD 20742

Mary J. Dorman, Radiation Safety Officer
Department of Environmental Safety
Sustainability & Risk
University of Maryland
4716 Pontiac Street
Seneca Building Suite 0103
College Park, MD 20742

Dr. Ray Phaneuf
Professor and Acting Chair
University of Maryland
Department of Materials Science
and Engineering
4418 Stadium Drive
College Park, MD 20742

Test, Research and Training
Reactor Newsletter
P.O. Box 118300
University of Florida
Gainesville, FL 32611

SUBJECT: UNIVERSITY OF MARYLAND – SUPPLEMENTAL INFORMATION NEEDED FOR ACCEPTANCE OF REQUESTED LICENSING ACTION RE: REQUEST FOR LICENSE AMENDMENT AUTHORIZING CHANGES TO TECHNICAL SPECIFICATIONS FOR THE USE OF 16 ADDITIONAL TRAINING REACTOR AND ISOTOPES PRODUCTION, GENERAL ATOMICS FUEL ELEMENTS IN THE MARYLAND UNIVERSITY TRAINING REACTOR (CAC NO. A11010/05000166-L-2018-LLA-0037) DATE MARCH 9, 2018

DISTRIBUTION:

PUBLIC	LTran, NRR	AAdams, NRR
PRLB r/f	MBalazik, NRR	SLynch, NRR
RidsNrrDlp	EHelvenston, NRR	RidsACRS_MailCTR
RidsNRRDlpPrb	NParker, NRR	
RidsNrrDlpProb	AMendiola, NRR	

ADAMS Accession No. ML18060A048

***via email concurrence**

OFFICE	NRR/DLP/PRLB/PM	NRR/DLP/PRLB/PM	NRR/DLP/PRLB/LA*	NRR/DLP/PRLB/ABC	NRR/DLP/PRLB/PM
NAME	LTran	MBalazik	NParker	SLynch	LTran (MBalazik <i>for</i>)
DATE	3/6/18	3/6/18/18	3/6/18	3/8/18	3/9/18

OFFICIAL RECORD COPY

SUPPLEMENTAL INFORMATION NEEDS

LICENSE AMENDMENT REQUEST RE: AUTHORIZING CHANGES TO TECHNICAL
SPECIFICATIONS FOR THE USE OF 16 ADDITIONAL TRAINING REACTOR AND
ISOTOPES PRODUCTION, GENERAL ATOMICS FUEL ELEMENTS IN THE MARYLAND
UNIVERSITY TRAINING REACTOR

UNIVERSITY OF MARYLAND

DOCKET NO. 50-166

By letter dated January 29, 2018 (Agencywide Documents Access and Management System Accession No. ML18032A096), the University of Maryland submitted a license amendment request for Maryland University Training Reactor (MUTR). The proposed amendment would allow for the addition of 16 lightly used training reactor and isotopes production, General Atomics (TRIGA) fuel elements into the current 93-element core.

The U.S. Nuclear Regulatory Commission staff has determined that the following information is necessary to make the application complete and acceptable for docketing:

1. General

The application does not contain a clear purpose of the proposed amendment request. The application should be supplemented to provide concise description and rationale for the requested changes.

2. License Conditions

The application does not address the possession limit for use in license condition (LC) 2.B.2.a and LC 2.B.2.b. The application should be supplemented to address the possession limit in LC 2.B.2.a and LC 2.B.2.b.

3. Technical Specifications

The application does not contain a sufficient description or justification for the proposed changes to the technical specifications (TSs). The application should be supplemented to provide a concise description of the changes to the MUTR TSs 3.1, 4.1 and 5.3, including the rationale for the changes.

4. Proposed Technical Specifications Change Pages

The application does not include proposed TSs change pages to support the license amendment. The NRC staff recommends that the application be supplemented to include the proposed TS change pages as an enclosure to the application.

5. References

The application does not include specific references used to support the proposed license amendment. The application should be supplemented to include a list of references that the licensee used to support the proposed license amendment.

Enclosure