



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

February 3, 2022

Dr. Partha Chowdhury, Director  
Nuclear Radiation Laboratory  
University of Massachusetts-Lowell  
One University Avenue  
Lowell, MA 01854

SUBJECT: UNIVERSITY OF MASSACHUSETTS LOWELL – ISSUANCE OF RENEWED FACILITY OPERATING LICENSE NO. R-125 FOR THE UNIVERSITY OF MASSACHUSETTS LOWELL RESEARCH REACTOR AND AMENDMENT NO. 11 TO INDEMNITY AGREEMENT NO. E-54 (EPID NOS. L-2015-RNW-0001, L-2020-NFR-0008)

Dear Dr. Chowdhury:

The U.S. Nuclear Regulatory Commission (NRC) has issued the enclosed Renewed Facility Operating License No. R-125 for the University of Massachusetts Lowell Research Reactor (UMLRR) in response to the University of Massachusetts Lowell (UML) application for license renewal dated October 20, 2015, as supplemented on March 16 and November 30, 2016; March 31, July 11, August 7, and September 13, 2017; January 6 and February 1, 2018; March 5, April 10, October 18, October 24, December 19, and December 20, 2019; February 24 and September 30, 2020; and January 30, February 16, April 5, and April 20, 2021. The renewed facility operating license is effective as of the date of issuance and shall expire at midnight, 20 years from the date of issuance, unless terminated sooner. The renewed license shall be implemented by UML within 60 days of issuance.

In accordance with agency practice, the NRC has restated the license in its entirety, incorporating all changes and amendments made since the issuance of the original license, as appropriate, as well as the changes made in conjunction with this renewal.

Also enclosed is the NRC staff's safety evaluation report associated with the license renewal.

A Notice of Issuance of Renewed Facility Operating License No. R-125 has been sent to the Office of the Federal Register for publication. The Notice of Availability of the Environmental Assessment and Finding of No Significant Impact for the UMLRR license renewal was published in the *Federal Register* on August 4, 2021 (86 FR 41998).

Additionally, the NRC has issued Amendment No. 11 to Indemnity Agreement No. E-54 between the NRC and UML, to update the agreement and reflect changes since the agreement was last amended, including changes associated with this renewal. Also enclosed with this letter are two signed copies of Amendment No. 11 to Indemnity Agreement No. E-54. Please sign and date both copies, retain one for UML's records, and return the other either electronically to me by e-mail at the address below, or by mail to the following address:

ATTN: Document Control Desk  
U.S. Nuclear Regulatory Commission  
Washington, DC 20555-0001

If you have any questions, please contact me at 301-415-4067, or by e-mail at [Edward.Helvenston@nrc.gov](mailto:Edward.Helvenston@nrc.gov).

Sincerely,



Signed by Helvenston, Edward  
on 02/03/22

Edward Helvenston, Project Manager  
Non-Power Production and Utilization Facility  
Licensing Branch  
Division of Advanced Reactors and Non-Power  
Production and Utilization Facilities  
Office of Nuclear Reactor Regulation

Docket No. 50-223  
License No. R-125

Enclosures:

1. Renewed Facility Operating  
License No. R-125
2. Safety Evaluation Report
3. Amendment No. 11 to Indemnity  
Agreement No. E-54 (2 signed copies)

cc: w/ Enclosures 1 and 2  
w/o Enclosure 3: See next page

University of Massachusetts - Lowell

Docket No. 50-223

cc:

Mayor of Lowell  
City Hall  
Lowell, MA 01852

Mr. Leo Bobek  
Reactor Supervisor  
University of Massachusetts - Lowell  
One University Avenue  
Lowell, MA 01854

Department of Environmental Protection  
One Winter Street  
Boston, MA 02108

Jack Priest, Director  
Radiation Control Program  
Department of Public Health  
Schrafft Center, Suite 1M2A  
529 Main Street  
Charlestown, MA 02129

Ms. Samantha Phillips, Director  
Massachusetts Emergency Management Agency  
400 Worcester Road  
Framingham, MA 01702-5399

Test, Research and Training  
Reactor Newsletter  
Attention: Ms. Amber Johnson  
Department of Materials Science  
and Engineering  
University of Maryland  
4418 Stadium Drive  
College Park, MD 20742-2115

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**ADAMS Accession No.:** Pkg. ML21168A050; Ltr. ML21168A053;  
 Encl 1\_Lic. ML21168A052; **Appendix to Encl 1** Lic. App. A (TS) ML21168A055;  
 Encl. 2 SE: ML21168A054; **FRN** ML21168A051

**NRR-106**

<b>OFFICE</b>	NRR/DANU/UNPL/PM	NRR/DANU/UNPL/LA	NMSS/REFS/FAB/BC
<b>NAME</b>	EHelvenston	NParker	FMiller
<b>DATE</b>	01/05/2022	01/06/2022	01/10/2022
<b>OFFICE</b>	NRR/DANU/UNPL/BC	OGC/NLO	NRR/DANU/DD
<b>NAME</b>	JBorromeo	JWachutka	JBowen
<b>DATE</b>	01/18/2022	01/27/2022	01/31/2022
<b>OFFICE</b>	NRR/DD	NRR/DANU/UNPL/PM	
<b>NAME</b>	RTaylor	EHelvenston	
<b>DATE</b>	02/02/2022	02/03/2022	

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