



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

November 26, 2018

Mr. William Francis Galvin, Chair
Massachusetts Historical Commission
220 Morrissey Boulevard
Boston, MA 02125

SUBJECT: UNIVERSITY OF MASSACHUSETTS LOWELL – PROPOSED RENEWAL OF FACILITY OPERATING LICENSE NO. R-125 FOR THE UNIVERSITY OF MASSACHUSETTS LOWELL RESEARCH REACTOR (EPID NO. L-2015-RNW-0001)

Dear Mr. Galvin:

The U.S. Nuclear Regulatory Commission (NRC) is conducting an environmental review of the effects of renewing the operating license for the University of Massachusetts Lowell (UML) Research Reactor (UMLRR), located in Lowell, Massachusetts, for a period of 20 years from the date of issuance of the renewed license. The application for renewal was submitted to the NRC by UML pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) Part 50, "Domestic Licensing of Production and Utilization Facilities." In accordance with 10 CFR 2.109, "Effect of timely renewal application," the existing license remains in effect until the NRC takes final action on the renewal application.

As part of the NRC staff's review, a site-specific environmental assessment (EA) is being prepared under the provisions of 10 CFR Part 51, "Environmental Protection Regulations for Domestic Licensing and Related Regulatory Functions," the NRC regulation that implements the National Environmental Policy Act of 1969 (NEPA). In accordance with 36 CFR 800.8(c), the NRC will comply with Section 106 of the National Historic Preservation Act of 1966, as amended (NHPA), through the NEPA process. The purpose of this letter is to initiate Section 106 consultation with the Massachusetts Historical Commission under NHPA. The EA will include analyses of potential impacts to historic and cultural resources.

The NRC has determined the area of potential effects (APE) for this proposed license renewal action is the reactor building (the project area) and its immediate environs (e.g., support areas outside the reactor building) that may be impacted by ongoing reactor operations. The APE may extend beyond the immediate environs in instances where ongoing reactor operations or occasional facility refurbishment activities may have a temporary visual or audible effect on known historic sites in the vicinity of the UMLRR. This determination is made irrespective of ownership or control of the lands of interest.

The NHPA requires federal agencies to consider the effects of their undertakings on historic properties. As stated in the NHPA, historic properties are any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in the National Register of Historic Places (NRHP). The NRHP lists several historic properties in Middlesex County, Massachusetts, within 0.6 miles (1 kilometer) of the UMLRR. The Lowell Locks and Canals

Historic District encompasses an area located across the Merrimack River from the UMLRR. The nearest historical site, building, or structure is the St. Joseph's Covent and School (National Register Listing No. 02000789), which is located within the Lowell Locks and Canals Historic District, about 0.3 miles (0.5 kilometers) from the UMLRR; this point is completely surrounded by development, and the view towards the UMLRR is obstructed by commercial and industrial properties.

The renewal of the operating license and the continued operation of the UMLRR would not require any construction or land disturbing activities, or major changes to the reactor facility design, or operating conditions. Furthermore, there have been no major modifications to the reactor facility since the issuance of the original operating license on December 24, 1974. Given the distance to historic properties, and given that the proposed action does not involve any changes in land use, new construction, rehabilitation of existing buildings, or demolition, the NRC has determined that there would be no adverse effect to historic properties in the vicinity of UMLRR as a result of the proposed license renewal action.

The NRC staff requests your concurrence on the above determination. Enclosure 1 to this letter is a completed Massachusetts Historical Commission Project Notification Form for the proposed action. Enclosure 2 to this letter provides a copy of the section of the U.S. Geological Survey Lowell quadrangle map which marks the location of the proposed action (Figure 1 of the enclosure), as well as an overhead photo of the UMLRR site (Figure 2 of the enclosure).

If you have any questions or require any further information, please contact Edward Helvenston of my staff at 301-415-4067, or by electronic mail at Edward.Helvenston@nrc.gov.

Sincerely,

/RA/

Alexander Adams, Jr., Chief
Research and Test Reactors Licensing Branch
Division of Licensing Projects
Office of Nuclear Reactor Regulation

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

Enclosures:

1. Massachusetts Historical Commission
Project Notification Form (completed)
2. U.S. Geological Survey Lowell quadrangle
map and UMLRR site photo

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