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## RADIATION LABORATORY

August 11, 2016

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

Re: NRC Generic Letter 2016-01, License No. R-125, Docket No. 50-223

This letter is submitted in response to the NRC Generic Letter 2016-01: *Monitoring of Neutron-Absorbing Materials in Spent Fuel Pools*.

The University of Massachusetts Lowell (UML) owns and operates a 1MW non-power research reactor. Part of the facility design includes fuel storage racks in a wet location within the reactor pool. The storage racks are briefly described in section 6.1 of the FSAR (1984) and more fully described in the draft FSAR (2015) submitted as part of license renewal. The storage racks are designed and constructed to hold no more than nine fuel elements in a linear array, and include a Boral sheet as part of the incorporated rack materials.

A criticality analysis for a rack fully loaded with fresh fuel elements has shown that without credit for the Boral sheet, the linear array has a maximum  $k_{\text{eff}}$  of  $<0.7$ . This value is well below the  $k_{\text{eff}}$  limiting value of  $<0.9$  for fissionable material storage specified in ANSI/ANS-15.1-2007: *The Development of Technical Specifications for Research Reactors*. Therefore, there is no credit assumed or taken for the Boral material in the fuel storage racks for the UMLRR.

Please direct any requests for additional information regarding this submittal to:

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

I declare under penalty of perjury that the foregoing is true and correct.

Sincerely,

A handwritten signature in black ink, appearing to read 'Leo M. Bobek'.

Leo M. Bobek  
Reactor Supervisor, Radiation Laboratory