



INSTITUTE FOR RESEARCH IN  
**ELECTRONICS**  
& **APPLIED PHYSICS**

Dr. Timothy W. Koeth  
Associate Research Professor  
Director, Nuclear Reactor & Radiation Facilities  
Energy Research Facility, Building 223,  
Paint Branch Drive, College Park, MD 20742-3511  
TEL: 301.405.4952 - FAX 301.314.9437 - koeth@umd.edu

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Document Control Desk  
United States Nuclear Regulatory Commission  
Washington, D.C. 20555-0001

RE: SNM Limit, Docket No. 50-166, License No. R-70, University of Maryland.

The Maryland Undergraduate Research Reactor hereby requests an amendment to the Facility Operating License No. R-70. The requested amendment is to allow us to receive and possess, but not use, up to 1,060 grams of contained uranium-235 enriched to less than 20 percent in the form of TRIGA reactor fuel.

We propose the following wording for a license condition to allow receipt and possession but not use of these sources:

Pursuant to the Act and 10 CFR Part 70, "Domestic Licensing of Special Nuclear Material," to receive and possess, but not use, up to 1,060 grams of contained uranium-235 enriched to less than 20 percent in the form of TRIGA reactor fuel.

A detailed justification for this request is provided in the attached document. Please contact me if you require any additional information.

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

Sincerely,

Timothy W. Koeth

A02D  
NRR

### Justification

The Maryland University Research Reactor (MUTR) is currently licensed to "to receive, possess and use up to 3,441 grams of contained uranium-235." We are working with the Department of Energy (DOE) to acquire 1,060 grams more of uranium-235 in the form of 19 TRIGA fuel elements.

Due to our need for new fuel, and with only slightly irradiated fuel available, we will be receiving a shipment of 19 used stainless steel clad TRIGA fuel elements from Idaho National Laboratory (INL) which will arrive before we have completed the analysis to load the fuel in the reactor. Therefore, MUTR must increase its possession limit of uranium-235.

Currently the MUTR has 3,441 grams of contained uranium-235 enriched to less than 20 percent in the form of TRIGA reactor fuel on site and expects to receive 1,060 grams of contained uranium-235 enriched to less than 20 percent in the form of TRIGA reactor fuel from (INL). The fuel from them is standard 8.5 weight-percent stainless steel clad TRIGA enriched to less than 20% in uranium-235. MUTR requests an amendment to the Facility Operating License No. R- 70 allowing us to receive and possess, but not to use, an additional 1,060 grams of uranium-235. A limit of 1,060 grams is proposed to cover any potential uncertainties in the total mass of uranium-235 in the MUTR inventory.

### Storage

Fuel storage at the MUTR is described in the MUTR Safety Analysis Report (February 1, 2000) section 9.2. In summary, the MUTR has a safe and secure storage capacity for 19 TRIGA fuel elements.

### Security

The fuel will be stored within our controlled access area with the rest of our TRIGA fuel in accordance with the MUTR Security Plan. The increase in fuel inventory does not change our security category.

The fuel from INL will remain in storage until we complete the necessary analysis and receive a future license amendment to use the fuel. We hope to accomplish this in 2017.