

The Damaging Effects of the Ten-Year Delay
by the NRC of the Maryland University
Training Reactor's License Renewal Application

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Materials Science and Engineering
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University of Maryland – Nuclear Engineering Program
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The Current Situation

As the Director the Maryland University Training Reactor (MUTR) I am dismayed by the NRC letter of April 21, 2010 to the University of Maryland demanding this public hearing to discuss the University's delays in providing responses for its renewal application.

The History of MU'TR's Compliance and Collaboration

Since its inception, 50 years ago,
MU'TR has an excellent relationship
with NRC and other federal agencies.

Chairman Klein's own words

Chairman Klein's Comments on SECY-08-0161, Review of Research and Test Reactor License Renewal Applications

Research and test reactors (RTRs) comprise a small, yet essential, part of the Nation's infrastructure. They perform critical functions in a variety of endeavors, including training, higher education, medical research, and materials research. With the growing need for nuclear education and training, the roles of these reactors will expand and gain importance. Indeed, the number of students enrolled in nuclear engineering courses of study is increasing, so it is not outside the realm of possibility that more RTRs will be deployed in coming years. Additionally, non-power reactors will be a critical part of the solution to the looming potential shortage of medical isotopes. The staff needs to identify and implement efficiencies that will streamline the license renewal process for non-power reactors now—the Nation cannot afford for the NRC to wait until 2012 or later to begin updating this regulatory process. Therefore, I join Commissioner Lyons in disapproving the staff's plan to delay working with licensees to consider development of a rule governing the RTR license renewal process pending completion of the current backlog. As elaborated below, the staff should begin now to streamline RTR license renewals concurrent with the long-term plan for an enhanced renewal process, and I approve the use of the options described in enclosure 1 to SECY-08-0161 to proceed in this direction.

Sequence of Events

1997-2000, May	May 24, 2000	10/10/02	10/03	10/10/03-4/05	1/19/06	8/06	8/06- November /2009
Preparation for the relicensing of MUTR started around August 1997. By 1998, the University had hired Jason Floyd to work only on relicensing. The relicensing work was focused solely on the use of NUREG 1537	Submission to NRC	118 RAIs received from the NRC. They ranged from reasonable to ridiculous questions. Some of the RAIs are not appropriate to to research reactors. Others are not required by NUREG 1537 nor are in our Technical Specifications.	After a challenging and dedicated effort, we satisfied our NRC manger with the responses to all RAIs . It was indeed a cause for celebration.	This period required hundreds of man hours to respond to the questions of NRC reviewers. Again most of these questions were nether related to NUREG 1537, to research reactors, or to MUTR's Technical Specifications.	We received a table from the NRC summarizing our communications with the NRC.	Responses submitted by the University of Maryland	More than three years with no feedback from the NRC. Three years of waiting to hear whether MUTR had been relicensed. We were unable to plan for the future. Plans for a power upgrade were put on hold.



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The December 10, 2009 NRC Letter and its Unrealistic Requests for Information

- The letter makes numerous request with only a very short response period, including a *detailed* decommissioning cost, broken down into many categories.
- Demanding a deadline of January 29, 2010, without asking if this was reasonable.
 - Ignoring the fact that it is the final weeks of the semester, final exams, the fact that University personnel were subject to 2 mandatory furlough days, and our official Christmas –New Year break during this time.



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The December 10, 2009 NRC Letter and its Unrealistic Requests for Information -

Continued

- The laborious task of determining the fine details required for the decommissioning cost
- Other technical issues, which we had already fully addressed back in 2000.
- Other questions like:
“Accordingly, please state whether the University is owned, controlled, or dominated by an alien foreign government, and if so give details”

The Mid-January 2010 Meeting Between the University of Maryland and the NRC

- Many technical issues were solved during the meeting.
- Several inappropriate questions and remarks were raised by the NRC and the Brookhaven National Lab consultants (a siphon question and a question about door, make me happy, it would be better to do it this way rather than this way, arguing about the radioactive concentrations ...)
- One of the consultants didn't know the NUREG 1537-1996.

No Communication from the NRC

- Dr. Traiforos promised to send more RAIs, if any, in the following week after the January meeting.
- There was no communication from the NRC until April 10, 2010
- During this period of no communication from the NRC, we had an opportunity to get some help from the Idaho National Lab.

Seeking Help from Idaho National Lab When the NRC proved non-responsive

Email dated 3/9/2010 from Idaho National Lab

■ **From:** Eric C Woolstenhulme [mailto:Eric.Woolstenhulme@inl.gov]
Sent: Tuesday, March 09, 2010 10:14 AM
To: Wade, James R
Cc: Morrell, Douglas Klingler; Mohamad Al-Sheikhly; Traiforos@umd.edu; "Spyros [Spyros.Traiforos"@nrc.gov]"
Subject: RE: Relicensing the University of Maryland Nuclear Reactor

Mohamad,

I am assembling the resources to help various reactor with this type of issue. To help me with that, would you please send me a list of the main things you need help on. As examples: 'Evaluate the thermal-hydraulic performance of the core' or 'respond to NRC Requests for Additional Information.' Also, list any commitment dates associated with the work.

I will take a look at your list and then call you about specifics.

Thanks much,
Eric C Woolstenhulme
Idaho National Laboratory
P.O. Box 1625, Idaho Falls, ID 83415-3870
Phone: (208) 526-4838 or (208) 351-3618
Email: Eric.Woolstenhulme@inl.gov

The University Tried to Communicate with the NRC - Without Any Success

Email dated 3/19 to the NRC:

From: mohamad [mailto:mohamad@umd.edu]
Sent: Friday, March 19, 2010 12:37 PM
To: 'Eric C Woolstenhulme'; 'Wade, James R'
Cc: 'Morrell, Douglas Klingler'; 'Traiforos@umd.edu'; 'Spyros.Traiforos"@nrc.gov]'; 'Pertmer Gary'; 'vga@umd.edu'
Subject: RE: Relicensing the University of Maryland Nuclear Reactor

Dear Eric,

During our last meeting with the NRC at the University of Maryland, we went through almost all technical issues related to the relicensing of MU'TR. Actually, we have been waiting since that meeting for the NRC response if they have any more RAIs. At the present, as far as we concern, we have already responded to all previous NRC –RAIs. I am ccing our friend Spyros in this e-mail requesting his comments

With all best wishes,

Mohamad

April 7, 2010 NRC Letter

- First paragraph: No recognition of the 10 year-delay by the NRC
- Unsubstantiated and incorrect allegations of UMD delaying the meeting
- Unsubstantiated and incorrect allegations about lack of response to NRC personnel
- Unsubstantiated and incorrect allegations about annual reports. These reports were sent several times to the NRC.
- False, deceiving, and incorrect statement about the NRC silence between mid January 2010 and mid-April 2010

Today's Meeting

- We were not informed about this public hearing. I received calls from the TRTR members informing us about it.
- Memorandum dated May 3, 2010 from Dr. Traiforos to Mrs. Brock. This memo has not involved our reactor NRC manager, Mr. Al Adams, nor our NRC inspector, Mr. Patrick Isaac. We strongly believe that Mr. Adams and Mr. Isaac should be present at this meeting.

Our Dedication and Commitment to MUTR and Strong Ties with the NRC

- The University of Maryland and MUTR values the NRC. We have all due respect for the NRC mission and dedication. The University of Maryland has been providing NRC with our best students.
- We are proud of our past relationship with NRC spanning many years.
- We shall continue working renew the license this year, which is the 50th anniversary of MUTR.

Milestone

- We have finished the financial decommissioning tables and other operation cost tables.
- We will submit the response to the additional RAIs by August 31, 2010, in reference to the NRC letter dated April 7th, 2010