

March 11, 2008

Mr. Michael J. Curley, Reactor Director
Worcester Polytechnic Institute
Office of the Vice President for Finance and Operations
100 Institute Road
Worcester, MA 01609-2280

SUBJECT: WORCESTER POLYTECHNIC INSTITUTE – REQUEST FOR ADDITIONAL
INFORMATION RE: AMENDMENT REQUEST FOR POSSESSION OF THE
WORCESTER POLYTECHNIC INSTITUTE REACTOR (TAC NO. MD6410)

Dear Mr. Curley:

We are continuing our review of your amendment request for Facility Operating License No. R-61 for the Worcester Polytechnic Institute Reactor which you submitted on August 13, 2007, as supplemented on November 19, 2007. During our review of your amendment request, questions have arisen for which we require additional information and clarification. Please provide responses to the enclosed request for additional information within 30 days of the date of this letter. In accordance with 10 CFR 50.30(b), your response must be executed in a signed original under oath or affirmation. Following receipt of the additional information, we will continue our evaluation of your amendment request.

If you have any questions regarding this review, please contact me at (301) 415-1127.

Sincerely,

/RA/

Alexander Adams, Jr., Senior Project Manager
Research and Test Reactors Branch A
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

Docket No. 50-134

Enclosure:
As stated

cc: See next page

Worcester Polytechnic Institute

Docket No. 50-134

cc:

City Manager
City Hall
455 Main Street, Room 309
Worcester, MA 01608

Dr. John A. Orr
Provost *ad interim* and Dean of Undergraduate Studies
Office of Academic Affairs
Worcester Polytechnic Institute
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Worcester, MA 01609

Frank Diliado III, District Chief
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40 Worcester Road
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Test, Research, and Training
Reactor Newsletter
University of Florida
202 Nuclear Sciences Center
Gainesville, FL 32611

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REQUEST FOR ADDITIONAL INFORMATION
WORCESTER POLYTECHNIC INSTITUTE REACTOR
DOCKET NO. 50-134

The purpose of the following questions is to determine compliance with 10 CFR 50.36.

1. During review of your replacement technical specification (TS) pages, the NRC staff noticed changes that appear to be typographical errors that occurred when the replacement pages were retyped. For example, the page numbering of the TS pages does not match the table of contents and in the definition of "Cold, Clean, Critical Condition" the "F" appears to have been dropped after "75°." Other examples appear to exist in the replacement TS pages. Please review and submit replacement pages if needed to ensure they reflect the changes you want to make.
2. Your answer to question 6 of our request for additional information dated October 22, 2007 (RAI), stated that the list of positions in the definition of "Readily on Call" is consistent with the positions that can serve as emergency director per the facility emergency plan (EP). While this is consistent with your letter of August 13, 2007, "Reply to a Notice of Violation," your EP and proposed definition of readily on call are inconsistent. Please address.
3. The proposed wording for the safety limit on water level states that the minimum depth of water above the top of the end box of the core fuel elements in the reactor pool shall be 10 ft. However, you state that all fuel has been removed from the reactor core and placed in storage. The proposed safety limit appears to be inconsistent with the fuel in storage. Please discuss.
4. Your answer to question 8 of the RAI states that requirements for pool water purity and surveillance will be maintained during possession of the facility. However, your proposed wording of TS 3.1 (semiannual requirement) only requires measurements and calibrations of equipment as long as fuel is present in the pool. This appears to be an inconsistency. Please discuss.
5. It appears that you have made changes to TS 3.3, the section on portable monitors, which are not discussed in your application. Please discuss and justify all changes you are proposing. It also appears that there may be some typographical errors in this section. Please review and correct if necessary.
6. It appears that you have made changes to TS 4.4, including eliminating part of the TS, which are not discussed in your application. Please discuss and justify all changes you are proposing.
7. The proposed wording for part of TS 5.2 given in your answer to question 14 and the wording in your replacement TS pages are different. Please discuss. Your proposed changes to TS 5.2 would remove the requirement that the Committee review and approve all proposed modifications affecting reactor safety, as well as general and specific types of experiments and procedures. Please justify this change.

8. In your proposed changes to TS 5.6, you have proposed dropping the requirement to keep certain records. These records could be useful in the development of your decommissioning plan (e.g., operating records can be used to determine activation of components). Also, these records may be needed to show compliance with regulatory requirements. Please elaborate further on why the requirement to keep these records can be eliminated.
9. It appears that you have proposed changes to TS 5.7 that are not discussed in your application. Please discuss and justify all changes that you are proposing.
10. Your application of August 13, 2007, contained proposed changes to TS 5.9. Your proposed TS pages do not contain your proposed changes. Please address.