

October 30, 2008

Dr. John Bernard
Director of Reactor Operations
MIT Nuclear Reactor
Laboratory
Mail Stop NW12-208a
138 Albany Street
Cambridge, MA 02139

SUBJECT: MASSACHUSETTS INSTITUTE OF TECHNOLOGY-REQUEST FOR
ADDITIONAL INFORMATION REGARDING AMENDMENT REQUEST (TAC No.
MC 5155)

Dear Dr. Bernard:

We are continuing our review of your request for amendment for Amended Facility Operating License No. R-37 for the Massachusetts Institute of Technology (MIT) Nuclear Reactor which you submitted on May 7, 2008. 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 request for amendment.

If you have any questions regarding this review, please contact me at 301-415-3398.

Sincerely,

/RA/

Cindy Montgomery, Project Manager
Research and Test Reactors Branch A
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

Docket No. 50-20
License No. R-37

Enclosure:
As stated

cc w/enclosure: See next page

Massachusetts Institute of Technology

Docket No. 50-20

cc:

City Manager
City Hall
Cambridge, MA 02139

Department of Environmental Protection
One Winter Street
Boston, MA 02108

Director
Radiation Control Program
Department of Public Health
90 Washington Street
Dorchester, MA 02121

Nuclear Preparedness Manager
Massachusetts Emergency Management Agency
400 Worcester Road
Framingham, MA 01702-5399

Test, Research, and Training
Reactor Newsletter
University of Florida
202 Nuclear Sciences Center
Gainesville, FL 32611

October 30, 2008

Dr. John Bernard
Director of Reactor Operations
MIT Nuclear Reactor
Laboratory
Mail Stop NW12-208a
138 Albany Street
Cambridge, MA 02139

SUBJECT: MASSACHUSETTS INSTITUTE OF TECHNOLOGY-REQUEST FOR
ADDITIONAL INFORMATION REGARDING AMENDMENT REQUEST (TAC No.
MC 5155)

Dear Dr. Bernard:

We are continuing our review of your request for amendment for Amended Facility Operating License No. R-37 for the Massachusetts Institute of Technology (MIT) Nuclear Reactor which you submitted on May 7, 2008. 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 request for amendment.

If you have any questions regarding this review, please contact me at 301-415-3398.

Sincerely,

/RA/

Cindy Montgomery, Project Manager
Research and Test Reactors Branch A
Division of Policy and Rulemaking
Office of Nuclear Reactor Regulation

Docket No. 50-20

License No. R-37

Enclosure:

As stated

cc w/enclosure: See next page

DISTRIBUTION:

PUBLIC

PRTA r/f

RidsNrrDprPrta

Accession Number: ML083020303

OFFICE	PRTA:PM		PRTA:LA		PRTA:BC		PRTA: PM
NAME	CMontgomery ckm		EBarnhill eeb		KBrock kmb		AAdams aa
DATE	10/30/08		10/30/08		10/30/08		10/30/08

OFFICIAL RECORD COPY

REQUEST FOR ADDITIONAL INFORMATION
REGARDING APPLICATION FOR LICENSE AMENDMENT
MIT NUCLEAR REACTOR
DOCKET NO. 50-20

1. What would the radiological impact be if the new sole heat exchanger developed a leak? How quickly would a leak be detected both when in operation and when shutdown?
2. Please provide additional detail to the statement "We note that reactor safety is not a function of the number of heat exchangers. The issue is whether or not the total heat transfer surface area needed for system heat removal is available."