

May 30, 2002

Dr. John A. Bernard, Director
Nuclear Reactor Laboratory
Massachusetts Institute of Technology
138 Albany Street
Cambridge, MA 02139-4296

SUBJECT: MASSACHUSETTS INSTITUTE OF TECHNOLOGY — AMENDMENT
RE ADMINISTRATIVE STRUCTURE (TAC NO. MB3760)

Dear Dr. Bernard:

The U.S. Nuclear Regulatory Commission has issued the enclosed Amendment No. 33 to Amended Facility Operating License No. R-37 for the Massachusetts Institute of Technology Research Reactor (MITR). The amendment consists of changes to the technical specifications (TS) in response to your application of December 19, 2001, as supplemented on March 20, 2002.

The amendment updates the administrative structure of the MITR.

A copy of the safety evaluation of Amendment No. 33 is also enclosed.

Sincerely,

/RA/

Alexander Adams, Jr., Senior Project Manager
Research and Test Reactors Section
Operating Reactor Improvements Program
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

Docket No. 50-20

Enclosures: 1. Amendment No. 33
2. Safety Evaluation

cc w/enclosures: Please see next page

Massachusetts Institute of
Technology

Docket No. 50-20

cc:

City Manager
City Hall
Cambridge, MA 02139

Department of Environmental
Quality Engineering
100 Cambridge Street
Boston, MA 02202

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

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MASSACHUSETTS INSTITUTE OF TECHNOLOGY

DOCKET NO. 50-20

AMENDMENT TO AMENDED FACILITY OPERATING LICENSE

Amendment No. 33
License No. R-37

1. The U.S. Nuclear Regulatory Commission (the Commission) has found that
 - A. The application for an amendment to Amended Facility Operating License No. R-37 filed by the Massachusetts Institute of Technology (MIT or the licensee) on December 19, 2001, as supplemented on March 20, 2002, conforms to the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the regulations of the Commission as stated in Chapter I of Title 10 of the *Code of Federal Regulations* (10 CFR);
 - B. The facility will operate in conformity with the application, the provisions of the Act, and the rules and regulations of the Commission;
 - C. There is reasonable assurance that (i) the activities authorized by this amendment can be conducted without endangering the health and safety of the public and (ii) such activities will be conducted in compliance with the regulations of the Commission;
 - D. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public;
 - E. This amendment is issued in accordance with the regulations of the Commission as stated in 10 CFR Part 51, and all applicable requirements have been satisfied; and
 - F. Prior notice of this amendment was not required by 10 CFR 2.105 and publication of a notice for this amendment is not required by 10 CFR 2.106.

2. Accordingly, the license is amended by changes to the Technical Specifications as indicated in the enclosure to this license amendment, and paragraph 2.C.(2) of Amended Facility Operating License No. R-37 is hereby amended to read as follows:

(2) Technical Specifications

The Technical Specifications contained in Appendix A, as revised through Amendment No. 33, are hereby incorporated in the license. The licensee shall operate the facility in accordance with the Technical Specifications.

3. This license amendment is effective as of the date of its issuance.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

/RA/

Patrick M. Madden, Section Chief
Research and Test Reactors Section
Operating Reactor Improvements Program
Division of Regulatory Improvement Programs
Office of Nuclear Reactor Regulation

Enclosure:
Appendix A, Technical
Specifications Changes

Date of Issuance: May 30, 2002

ENCLOSURE TO LICENSE AMENDMENT NO. 33

AMENDED FACILITY OPERATING LICENSE NO. R-37

DOCKET NO. 50-20

Replace the following pages of Appendix A, "Technical Specifications," with the enclosed pages. The revised pages are identified by amendment number and contain vertical lines indicating the areas of change.

Remove

7-1
7-2
7-3

Insert

7-1
7-2
7-3

7. ADMINISTRATIVE CONTROLS

Applicability

Administrative controls are the means by which reactor operations are subject to management control. Measures specified in this section provide for the assignment of responsibilities, reactor organization, staffing qualifications and related requirements, review and audit mechanisms, procedural controls and reporting requirements. Each of the measures are applicable as minimum requirements throughout reactor life.

Objective

To assure that adequate management controls are available for safe facility operation.

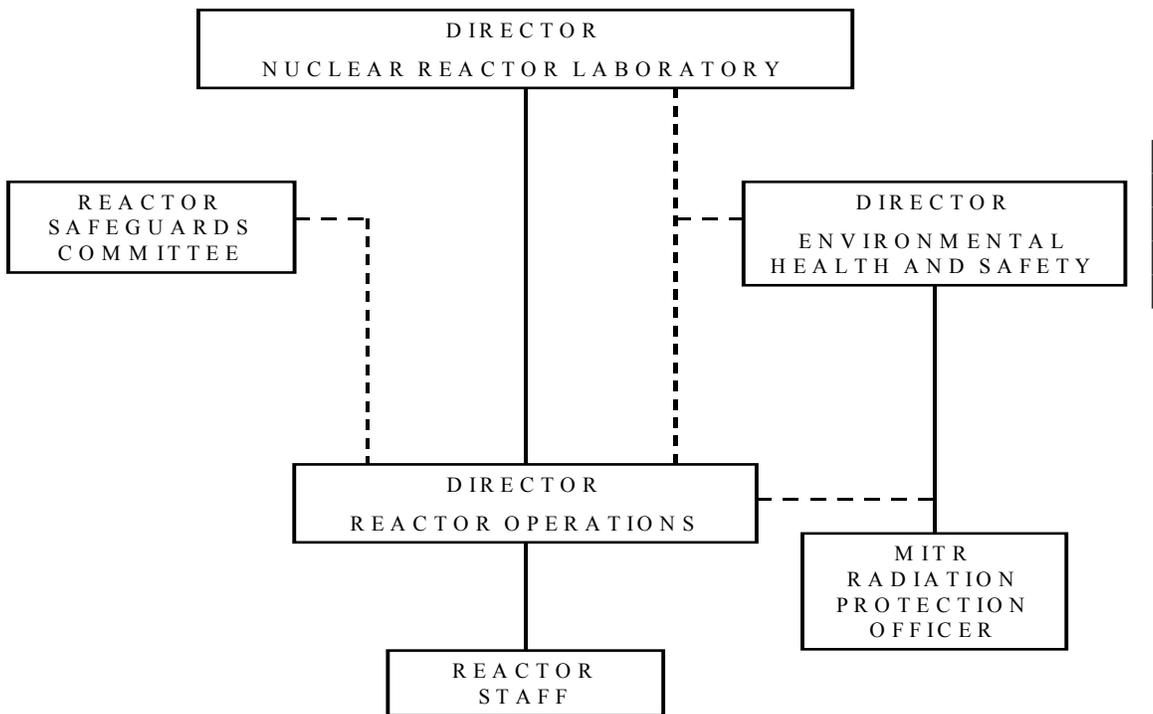
7.1 Responsibility

7.1.1 The Director of Reactor Operations is directly responsible for the safe operation of the facility.

7.1.2 In all matters pertaining to safe operation of the MIT Reactor (MITR) and to these Technical Specifications, the Director of Reactor Operations shall report to and be directly responsible to the Director of the Nuclear Reactor Laboratory. The management organization is shown in Figure 7.1-1.

7.1.3 The MITR Radiation Protection Officer shall be responsible for radiation protection at the MITR. He shall advise the Director of Reactor Operations in all matters pertaining to radiation protection.

7.1.4 The MITR Radiation Protection Officer shall report to, and be directly responsible to, the Director of MIT Environmental Health and Safety.



————— Solid Line Indicates Direct Management Responsibility.

- - - - - Dotted Line Indicates Review and Approval in Areas of Responsibility Defined by these Technical Specifications and the MIT Administration under the Direction of the President of M.I.T.

Fig. 7.1-1 Management Organization

7.1.5 The MITR Radiation Protection Officer shall be a member of the Reactor Safeguards Committee.

7.1.6 In the event of disagreement between the recommendations of the MITR Radiation Protection Officer and the Director of Reactor Operations or their alternates, on matters pertaining to radiation protection, the course determined by the Director of Reactor Operations or his designated alternate to be more conservative will be followed. Records of the disagreement will be sent for review and possible reconsideration to the Director of MIT Environmental Health and Safety, the Director of the Nuclear Reactor Laboratory, and the Chairman, MIT Reactor Safeguards Committee.

SAFETY EVALUATION BY THE OFFICE OF NUCLEAR REACTOR REGULATION

AMENDMENT NO. 33 TO

AMENDED FACILITY OPERATING LICENSE NO. R-37

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

DOCKET NO. 50-20

1.0 INTRODUCTION

By letter dated December 19, 2001, as supplemented on March 20, 2002, the Massachusetts Institute of Technology (MIT or the licensee) submitted a request for amendment of the technical specifications (TSs) for Amended Facility Operating License No. R-37 for the MIT Research Reactor (MITR). The requested changes update the administrative structure of the MITR.

2.0 EVALUATION

MIT has revised its environmental, health, and safety organization. The reorganization eliminated the position of MIT radiation protection officer (RPO). The MITR RPO used to report to and be directly responsible to the MIT RPO. The licensee proposes that the MITR RPO report to and be directly responsible to the Director of MIT Environmental Health and Safety. TS 7.1.4 currently reads:

- 7.1.4 The MITR Radiation Protection Officer shall report to, and be directly responsible to, the MIT Radiation Protection Officer.

The licensee proposes to change this to read:

- 7.1.4 The MITR Radiation Protection Officer shall report to, and be directly responsible to, the Director of MIT Environmental Health and Safety.

The licensee also proposes to change TS Figure 7.1.1, "Management Organization," to reflect the new reporting requirement for the MITR RPO.

TS 7.1.6 which currently reads as follows:

- 7.1.6 In the event of disagreement between the recommendations of the MITR Radiation Protection Officer and the Director of Reactor Operations or their alternates, on matters pertaining to radiation protection, the course determined by the Director of Reactor Operations or his designed alternate to be more conservative will be followed. Records of the disagreement will be sent for review and possible reconsideration to the MIT Radiation Protection

Officer, Director of the Nuclear Reactor Laboratory and the Chairman, MIT Reactor Safeguards Committee.

The licensee proposes to change the TS to read as follows:

- 7.1.6 In the event of disagreement between the recommendations of the MITR Radiation Protection Officer and the Director of Reactor Operations or their alternates, on matters pertaining to radiation protection, the course determined by the Director of Reactor Operations or his designed alternate to be more conservative will be followed. Records of the disagreement will be sent for review and possible reconsideration to the Director of MIT Environmental Health and Safety, the Director of the Nuclear Reactor Laboratory, and the Chairman, MIT Reactor Safeguards Committee.

These proposed TSs replace the MIT RPO position by the position of Director of MIT Environmental Health and Safety. This change is part of a consolidation of environmental, health and safety functions at MIT into one management chain (most of the changes have nothing to do with the MITR). The MIT RPO was eliminated in the reorganization. As a result, the MITR RPO reports to a higher level of MIT management (Director of MIT Environmental Health and Safety). Through the use of MIT staff and consultants, the Director of MIT Environmental Health and Safety has access to whatever level of radiation protection expertise is needed to oversee the MITR RPO and the radiation protection function at the MITR. This proposed change maintains at least the same level of management attention as the current TSs to the radiation protection function at the MITR. The proposed TS amendment does not change the duties and responsibilities of the MITR RPO.

Because the proposed replacement of the MIT RPO by the Director of MIT Environmental Health and Safety maintains high-level MIT management oversight of the radiation protection program at the MITR, the staff concludes that the proposed changes to the TSs are acceptable.

TS 7.1.5 reads as follows:

- 7.1.5 The MIT Radiation Protection Officer shall be a member of the Reactor Safeguard Committee.

The licensee proposes:

- 7.1.5 The MITR Radiation Protection Officer shall be a member of the Reactor Safeguards Committee.

The replacement of the MIT RPO by the MITR RPO will maintain radiation protection expertise on the Reactor Safeguards Committee. Three other persons currently on the Reactor Safeguards Committee have radiation protection experience (e.g., the former MIT RPO is on the committee as a consultant). Because the proposed TS change maintains radiation protection expertise on the Reactor Safeguards Committee, this change is acceptable to the staff.

The staff noted that two minor changes to proposed TS 7.1.6 were not discussed in the licensee's application, (the phrase "Director of the Nuclear Reactor Laboratory" was changed to "the Director of the Nuclear Reactor Laboratory," in the last sentence of TS 7.1.6). A typographical error was also corrected on Figure 7.1-1, "Management Organization," and TS 7.1.5, "Reactor Safeguard Committee," was changed to "Reactor Safeguards Committee." The project manager confirmed these changes with the Director of the MIT Nuclear Reactor Laboratory during telephone conversations on April 23, 2002. These changes are acceptable to the staff.

3.0 ENVIRONMENTAL CONSIDERATION

This amendment involves changes in recordkeeping, reporting, or administrative procedures or requirements. Accordingly, the amendment meets the eligibility criteria for categorical exclusion set forth in 10 CFR 51.22(c)(10). Pursuant to 10 CFR 51.22(b), no environmental impact statement or environmental assessment need be prepared in connection with the issuance of this amendment.

4.0 CONCLUSION

The staff has concluded, on the basis of the considerations discussed above, that (1) the amendment does not involve a significant hazards consideration because the amendment does not involve a significant increase in the probability or consequences of accidents previously evaluated, create the possibility of a new kind of accident or a different kind of accident from any accident previously evaluated, or involve a significant reduction in a margin of safety, (2) there is reasonable assurance that the health and safety of the public will not be endangered by the proposed activities; and (3) such activities will be conducted in compliance with the Commission's regulations and the issuance of this amendment will not be inimical to the common defense and security or the health and safety of the public.

Principal Contributor: A. Adams, Jr.

Date: May 30, 2002