

NUCLEAR REACTOR LABORATORY AN INTERDEPARTMENTAL CENTER OF MASSACHUSETTS INSTITUTE OF TECHNOLOGY



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Activation Analysis Coolant Chemistry Nuclear Medicine **Reactor Engineering**

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Nuclear Regulatory Commission Attn: Document Control Desk Washington, D.C. 20555

Submission of Revision One of Safety Analysis Report, Operating License No. Subject: R-37, Massachusetts Institute of Technology, Docket No. 50-20

Gentlemen:

On 8 July 1999, the Massachusetts Institute of Technology requested renewal of Reactor Operating License No. R-37. As part of that request, an updated safety analysis report (revision zero) was submitted. Enclosed is revision one to that Safety Analysis Report. This replaces revision zero in its entirety. Most of the changes incorporated in revision one were made at the suggestion of the MIT Committee on Reactor Safeguards for the purpose of improving clarity. There were also several substantive changes. These include a reduction in the amount of byproduct material that may be received on the MITR Operating License, a more conservative approach to the handling of radiolytic gas generated in the reactor core or reflector tanks, and an updated description of the secondary coolant system. The latter includes the new cooling tower for which installation was completed in September 1999. Also submitted at this time are a revised set of technical specifications.

Please contact the undersigned if further information is required.

Sincerely,

Lin Wen Hu, Ph.D.

Reactor Relicensing Engineer

John A. Bernard, Ph.D. Director

JAB/koc

Enclosure

- cc: USNRC
- Senior Project Manager, NRR/ONDD
- USNRC **Region I - Project Scientist** Effluents Radiation Protection Section (ERPS) FRSSB/DRSS