FEB 9 1990

Docket No: 50-20

Massachusetts Institute of Technology
Research Reactor
ATTN: Dr. John A. Bernard, Jr.
Director of Reactor Operations
138 Albany Street
Cambridge, Massachusetts 02139

Gentlemen:

Subject: Inspection 50-20/89-03 (OL)

This refers to your letter dated January 18, 1990, in response to our letter dated November 29, 1989.

Thank you for informing us of the correcti and preventive actions documented in your letter. These actions will be examined during a future inspection of your licensed program.

Your cooperation with us is appreciated.

Sincerely,

ROBERT M. GALLO

Robert M. Gallo, Chief
Operations Branch
Division of Reactor Safety

cc:
Dr. O. K. Harling, Director of the Reactor Laboratory
K. S. Kwok, Superintendent of Reactor Operations
Dr. William Vernetson, Director of Nuclear Facilities,
University of Florida
Public Document Room (PDR)
Local Public Document Room (LPDR)
Nuclear Safety Information Center (NSIC)
Commonwealth of Massachusetts (2)

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bcc:
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R. Blough, DRP
J. Lyash, DRP
C. Warren, SRI - Pilgrim
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NUCLEAR REACTOR LABORATORY

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J.A. BERNARD, JR.
Director of Reactor Operations

January 18, 1990

U. S. Nuclear Regulatory Commission
Washington, D.C. 20555
ATTN: Document Control Desk

Subject: Response to NRC Letter Dated 11/29/89 Concerning Operator Examination No. 50-20/89-03 (OL).

Gentlemen:

This letter is submitted in response to the request of Mr. Robert M. Gallo (Chief, Operations Branch, Division of Reactor Safety, Region I, USNRC) concerning Operator Examination No. 50-20/89-03 (OL). Mr. Gallo's letter dated 11/29/89 served to transmit Operator Licensing Examination Report No. 89-03, Section 3 of which documented several areas of concern relative to the operating examinations of the senior reactor operator candidates.

As a general comment, we are in agreement with the Chief Examiner, Mr. Wallace, concerning individual candidates and we note that Mr. Gallo's letter pertained only to those candidates. We do not feel that there is a generic deficiency in our training program nor do we feel that those members of our staff who currently hold senior operator licenses are deficient in these areas. Evidence for this conclusion is as follows:

(a) The current training program (with NRC directed modifications) has been in effect since 1979. Also, the personnel responsible for implementing that program have been doing so since that time. Prior to the September 1989 exams, a total of 17 candidates had been trained under the current program and, of these, all 17 had received their licenses.

(b) The facility has been inspected on almost an annual basis since 1984 on emergency preparedness. These inspections have resulted either in the identification of minor, readily-corrected deficiencies or in a finding of no deficiencies.

Relative to the operator licensing examination report, we have taken or will take the following general and specific actions:

General:

(1) A copy of the transmittal letter and the report was given to all licensed operators (SRO and RO).

(2) All licensed personnel are being required to sign a statement in which they certify that they have read the operator licensing examination report.

(3) The operator licensing examination report was discussed with certain members of the MIT Reactor Safeguards Committee upon its receipt and with the full Committee as an agenda item at a regularly scheduled meeting on 12/20/89. The Committee approved the specifics of our corrective action at that time.

Specific:

(a) Both the facility's emergency operating procedures (EOPs) and the abnormal operating procedures (AOPs) were reviewed to determine if improvements could be made both to assist personnel in transiting from the AOPs to the EOPs and to aid personnel in classifying emergencies. One such area was identified. This area is the incorporation of Emergency Action Levels (EALs) in the AOPs. Details are as follows. Certain procedures (e.g., loss of core tank level) appear in both the EOPs and AOPs. Emergency action levels (EALs) have, of course, been defined for use in classifying the situations covered by these procedures. For the EOPs, the EALs are listed in tabular form as part of each procedure. For the AOPs, these tables were inadvertently omitted. This situation is now being rectified and we anticipate that action will be completed by 03/31/90. This action addresses the first and second of the two identified weaknesses noted in the operator licensing examination report.

(b) The MITR Radiation Protection Officer held two lectures/demonstrations on radiological controls. These were attended by all licensed personnel as well as by the reactor mechanic and certain experimenters. This action addressed the third of the three identified weaknesses noted in the operator licensing examination report. On a continuing basis, we will stress questions in the identified areas (frisking/radiation barriers) on the radiological controls review that is conducted annually for all operators as part of the existing training program.

In addition to the above, we will of course be working with the individual candidates who failed the examination to improve their knowledge in these areas.

Sincerely,

Kwan S. Kwok
Superintendent
MIT Research Reactor

John A. Bernard, Ph.D.
Director of Reactor Operations
MIT Research Reactor

JAB/crh

cc: USNRC - Region I - Chief,
Reactor Projects Section 3B
USNRC - Region I - Project Engineer,
Reactor Projects Section 3B
USNRC - Senior Resident Inspector,
Pilgrim Nuclear Station
USNRC - Region I - Chief,
Operations Branch
Division of Reactor Safety
USRNC - Mr. David Wallace,
Region I
Operations Engineer (Examiner)