



MIT NUCLEAR REACTOR LABORATORY

AN MIT INTERDEPARTMENTAL CENTER

Edward Lau
Assistant Director
Reactor Operations

Mail Stop: NW12-122
138 Albany Street
Cambridge, MA 02139

Phone: 617 253-4211
Fax: 617 324-0042
Email: eslau@mit.edu

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U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Attn.: NRC Licensing Project Manager Patrick Boyle / Document Control Desk
Subject: 10 CFR 55 Requirement Exemption Request for the Massachusetts Institute of Technology Research Reactor, Facility Operating License No. R-37
Reference: NRC Letter from H. Nieh to NEI, "*U.S. Nuclear Regulatory Commission Planned Actions Related to the Requirements for Operator Licensing during the Coronavirus Disease 2019 Public Health Emergency*," dated 14 April 2020

As a result of the ongoing COVID-19 public health emergency (PHE), the Massachusetts Institute of Technology (MIT) Research Reactor was shut down on 13 March. Since 18 March, access to the reactor building and the rest of the MIT Nuclear Reactor Laboratory (NRL) has been significantly restricted and for essential personnel only. With the schedule and steps for reopening remaining uncertain, the NRL hereby requests the U.S. Nuclear Regulatory Commission (NRC) provide relief/exemption from certain 10 CFR Part 55 Operator Licensing requirements for licensed personnel as documented in this exemption request. This request is being made to support MIT efforts to observe recommendations from the U.S. Centers for Disease Control & Prevention and the Commonwealth of Massachusetts related to social distancing, stay-at-home, and limiting close-proximity work.

The NRL considers reliable operator performance to be essential to safe operations, and in accordance with the Reference letter, requests that operators and senior operators be exempted from the requirements of the following regulations:

1. Medical Examination Requirements for Licensed Personnel

Per 10 CFR 55.21, 10 CFR 55.53(i), and ANSI/ANS-15.4-2016 Section 7.1.2 Medical Examination Frequency, medical examinations by a designated medical examiner or physician shall be conducted no less than every two years. Many medical offices have cancelled routine examinations because of the PHE. In particular, the MIT Medical Department has suspended all in-person occupational

health appointments through at least 29 June, including NRC Form 396 physical examinations. The following table lists the names, docket numbers, and last medical exam dates of the NRL licensed personnel who are due for medical examinations from May through August 2020. The individuals listed in the table may be unable to receive a Part 55.21 medical examination prior to their expiration dates.

Operator		License Number	Docket Number	Date of Last Medical Exam
██████████	██	██████████	██████████	██████████
██████████	██	██████████	██████████	██████████
██████████	██	██████████	██████████	██████████

Interim compensatory measures that the NRL hereby proposes to address the delay in receipt of recommendations from a licensed physician concerning the individuals' health are: (a) partial examinations to be conducted remotely, either by telephone or by live-video telehealth visits, in the case that the physician or designated medical examiner is available in that manner, and (b) review and certification by the Level 2 senior management representative using the individual's Medical History Survey Form if there is no change in the examinee's health or medication compared with the last medical examination, in the case that the physician or designated medical examiner is unavailable. A copy of the Medical History Survey Form, which is normally filled out by the examinee for physician reviews, is enclosed. In the case of (b), the examinee is to provide a written statement attesting to physical condition and general health, and any medication change, for review by the Level 2 representative. If there has been a change in the examinee's health or medication, the Level 2 representative will declare the individual's license inactive until a full, in-person examination by a physician or designated medical examiner is completed.

For both (a) and (b) above, when MIT reopens and the NRL resumes routine operation, the examinee shall complete a full, in-person medical examination by a physician or designated medical examiner per ANSI/ANS-15.4-2016, within 90 days or by 31 December 2020, whichever occurs first.

2. Four Hours of Operating Time per Calendar Quarter

Per 10 CFR 55.53(e), 10 CFR 55.53(f)(2), and ANSI/ANS-15.4-2016 Section 6.5 Absence from Licensed Functions, licensed personnel who have not actively performed the functions of an operator or senior operator for a minimum of 4 hours per calendar quarter shall perform a minimum of 6 hours of licensed functions under the direction of a qualified individual holding the same or higher-level license prior to being reinstated. Given the uncertainty of the reopening schedule, by July 2020 all

NRL licensed personnel may be out of compliance with this requirement. In association with the request that all operators and senior operators be exempted from meeting the requirements of the above regulations, the NRL proposes, as an interim compensatory measure, that all licensed personnel perform the functions of an operator or senior operator for a minimum of 6 hours (direct supervision not required) within 90 days after MIT reopens and the affected licensed individuals are permitted to return to work.

The following table lists the names, docket numbers, and current watch-standing expiration dates for NRL licensed personnel. The individuals listed in the table may be unable to complete 4 hours of active licensed duty prior to their quarterly expiration dates. Because this expiration occurs at the end of June 2020 for all licensed personnel at the facility, no qualified individuals would remain to supervise the subsequent 6-hour requirements for performance of licensed duty under direction which would normally be necessary in order to reinstate the licenses as active.

Operator		License Number	Docket Number	Quarterly Watch-Standing Expires
██████████	██	██████████	██████	██████
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[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]		[REDACTED]
[REDACTED]	[REDACTED]	[REDACTED]		[REDACTED]

The NRL, in conjunction with the training program, will continue to evaluate operator performance in the reactor facility and control room to identify and correct operator performance issues in a timely manner. Furthermore, refresher training lectures on specific reactor operating systems and procedures will continue remotely on a monthly basis, in accordance with MIT Reactor Safety Analysis Report (SAR) Section 12.10.4, during the period of the PHE work-from-home requirements. The Requalification Program Coordinator (RPC) is the authorized representative to certify and document completion of these alternate measures. When necessary, the RPC shall consult with the MIT Reactor's Senior Review Board which includes the Director of Reactor Operations, Assistant Director of Reactor Operations, Reactor Superintendent, and Quality Assurance Supervisor. Adherence to this program, and the compensatory measures described in items (1) and (2) above, will ensure safety and regulatory compliance, as well as maintain satisfactory operator performance.

MIT understands that if these exemption requests are approved by NRC, the exemptions will be in effect until 90 days after the PHE is ended and all licensed personnel are permitted to return to work, or 31 December 2020, whichever occurs first.

Sincerely,



Edward S. Lau, NE
Assistant Director of Reactor Operations
MIT Research Reactor

I declare under penalty of perjury that the foregoing is true and correct.

Executed on 5/11/2020
Date


Signature

Enclosure: Medical History Survey Form

cc: USNRC – Senior Project Manager
Research and Test Reactors Licensing Branch
Division of Licensing Projects
Office of Nuclear Reactor Regulation

USNRC – Senior Reactor Inspector
Research and Test Reactors Oversight Branch
Division of Licensing Projects
Office of Nuclear Reactor Regulation