

## SAFETY EVALUATION REPORT

DOCKET: 70-938  
LICENSE: SNM-986  
LICENSEE: MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
SUBJECT: 2017-2018 MASSACHUSETTS INSTITUTE OF TECHNOLOGY  
SELF-GUARANTEE ANNUAL CERTIFICATION

### BACKGROUND

In a letter dated September 29, 2017, Massachusetts Institute of Technology (MIT) submitted its annual certification of its self-guarantee (SG) for decommissioning financial assurance for its Special Nuclear Material license (SNM-986). On October 19, 2017, the Fuel Manufacturing Branch requested technical assistance with the SG submission from the Performance Assessment Branch (PAB). On November 3, 2017, the PAB determined that MIT's SG submittal was adequate to perform a technical review. On December 12, 2017, the PAB completed its technical review of MIT's SG submittal.

### DISCUSSION

#### Regulatory Requirements

Nuclear facilities licensed under Title 10 of the *Code of Federal Regulations* (10 CFR) Part 70 are required to establish adequate financial assurance for decommissioning, decontamination, and reclamation pursuant to 10 CFR Section 70.25, "Financial Assurance and Recordkeeping for Decommissioning" respectively. Section 70.25 of 10 CFR requires non-profit college and university licensees that provide reasonable assurance of available funds for decommissioning costs through a SG to annually provide an SG agreement and pass a financial test pursuant to Appendix E to 10 CFR Part 30, "Criteria Relating to Use of Financial Tests and Self-Guarantees For Providing Reasonable Assurance of Funds For Decommissioning by Nonprofit Colleges, Universities, and Hospitals." MIT is a holder of a Reactor license and a SNM License. This review pertains to MIT's SNM License.

#### Staff Review

Upon review of MIT's September 29, 2017, submittal, as detailed below, the U.S. Nuclear Regulatory Commission (NRC) staff finds that MIT's SG is acceptable.

#### Staff Review of Self-Guarantee and Supporting Documentation

In its review, the NRC staff relied on the regulations set forth in Appendix E of 10 CFR Part 30 and 10 CFR Section 70.25, as well as NRC guidance contained in NUREG-1757, Volume 3, Rev. 1, Appendix A.9. MIT's September 29, 2017, SG submission included:

- a SG;
- a letter from MIT's Executive Vice President and Treasurer, Chief Financial Officer (CFO) and financial test;
- a Report of Independent Accountants;
- and MIT's Independent Auditor's Report within its Report of the Treasurer (dated June 30, 2017).

Enclosure

MIT has previously submitted both an SG agreement and Standby Trust Agreement that has been approved by the NRC staff. Both agreements remain adequate to cover the current certified decommissioning costs for MIT's 10 CFR Part 70 license.

In order for MIT to qualify for use of a SG, it must satisfy the criteria found in 10 CFR Part 30, Appendix E, Section II.A.1 or A.2. MIT's SG submission intends to demonstrate compliance with 10 CFR Part 30, Appendix E, Section II.A.1 (the "Financial Test"). The Financial Test, in pertinent part, requires that MIT have a current rating for its most recent bond issuance of AAA, AA, A as issued by Standard & Poor's or AAA, AA, or A as issued by Moody's.

As part of the SG submission, the letter from MIT's Executive Vice President and Treasurer Chief Financial Officer (CFO) included the identification of the Financial Test used as part of NUREG - 1757, Volume 3, Appendix A, Checklist 9-B to demonstrate passage of the Financial Test.

The SG submission states that the current bond rating of the most recent unsecured bond issuance is AAA, as rated by Standard & Poor's. Therefore, MIT meets the requirement of 10 CFR Part 30, Appendix E, Section II.A.1. Thus, MIT meets the requirements of the Financial Test.

Part 30 of 10 CFR, Appendix E, Section III.A through F, describes the terms that are required in a SG:

- A. The guarantee will remain in force unless the licensee sends notice of cancellation by certified mail, and/or return receipt requested to the NRC. Cancellation may not occur unless an alternative financial assurance mechanism is in place;
- B. The license shall provide alternate financial assurance as specified in the NRC's regulations within 90 days following receipt by the NRC of a notice of cancellation of the guarantee;
- C. The guarantee and financial test provisions must remain in effect until the NRC has terminated the license or until another financial assurance method acceptable to the NRC has been put in effect by the licensee;
- D. The applicant or licensee must provide to the NRC a written guarantee which states that the licensee will fund and carry out the required decommissioning activities or, upon issuance of an order by the NRC, the licensee will set up and fund a trust in the amount of the current cost estimates for decommissioning; and
- E. If, at any time, the licensee's most recent bond issuance ceases to be rated in any category of "A" or above by either Standard and Poors or Moodys, the licensee shall provide notice in writing of such fact to the NRC within 20 days after publication of the change by the rating service;
- F. A standby trust must be established to protect public health and safety and the environment for decommissioning costs prior to an SG being submitted.

The NRC staff finds the language of the SG complies with the terms and conditions needed in NUREG-1757, Volume 3, Appendix A.13. Because the SG is consistent with the recommended language contained in NUREG -1757, Volume 3, Appendix A.9, Checklist B, which the NRC staff has previously determined would comply with the NRC's regulatory requirements, the staff therefore finds that the proposed SG meets the requirements of 10 CFR Part 30, Appendix E, Section III.A, B, C, D, E, and F.

Relying upon the SG submission, the NRC staff finds that MIT meets the requirements of the Financial Test set forth in 10 CFR Part 30, Appendix E, Section II.A.1, the SG and CFO Letter are consistent with NRC guidance, and that the SG meets the requirements of 10 CFR Part 30, Appendix E, Section III.A through F.

## **CONCLUSION**

On the basis of the NRC staff's review, as discussed above, MIT has demonstrated that: (1) it's financial condition meets the requirements of 10 CFR Part 30, Appendix E, and (2) the language of the CFO Letter, independent auditor's report, and previously submitted and approved SG agreement and STA agreement are consistent with NRC guidance. Therefore, the NRC staff finds that MIT's SG and supporting documentation are acceptable and are, therefore, approved.

### **Principal Contributor**

Reggie Augustus