

## SAFETY EVALUATION REPORT INPUT

DOCKET: 70-938

LICENSES: SNM-986, R-37

LICENSEE: MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SUBJECT: MASSACHUSETTS INSTITUTE OF TECHNOLOGY SELF-GUARANTEE  
ANNUAL CERTIFICATION

### BACKGROUND

In a letter dated January 8, 2014, the Massachusetts Institute of Technology (MIT) submitted its annual certification of its self-guarantee (SG) for its Special Nuclear Material (SNM) License SNM-986, and the Research Reactor License Number R-37 (R-37). The Special Projects Branch of the Office of Federal Materials and State Materials and Environmental Management Programs conducted the review of SNM-986. The Financial Analysis and International Projects Branch of the Office of Nuclear Reactor Regulation reviewed the R-37 portion of the submittal. The submittal was found acceptable for a more detailed review on February 24, 2014. On March 25, 2014, MIT submitted a draft Standby Trust Agreement (STA) per U.S. Nuclear Regulatory Commission (NRC) request, to meet the regulatory requirements for an STA to be established for SG's. On March 31, 2014, staff informed MIT via email that the draft STA was consistent with NRC guidance and regulatory requirements. The executed STA was received on April 10, 2014.

### 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 70.25, "Financial Assurance and Recordkeeping for Decommissioning." Section 70.25 of 10 CFR requires that non-profit college and university licensees that provide reasonable assurance of available funds for decommissioning costs through an SG are required 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.

### DISCUSSION

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

In its review, the staff relied on the regulations set forth in Appendix E to 10 CFR Part 30 and 10 CFR 70.25, as well as NRC guidance contained in NUREG-1757, Volume 3, Rev. 1, Appendix A.9. MIT's January 8, 2014, submittal included:

- an SG;
- a letter from MIT's Executive Vice President and Treasurer (CFO) and financial test; and

Enclosure

- MIT's Audited Financial Statements and Auditor's Opinion.

An STA has been required for licensees using a SG since the issue of the Decommissioning Planning Rule in December 2012. This was the first cycle since then that MIT was required to submit a STA. This was identified to MIT staff soon after receipt of the SG. MIT staff pursued the preparation and coordination of an STA. A draft document was submitted to the Agency on March 25, 2014. An executed, and required document, was received on April 10, 2014.

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 January 14, 2014, submittal 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 and Poor's or Aaa, Aa, or A as issued by Moody's.

As part of the January 14, 2014, submittal, the letter from MIT's 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 submittal states that the current bond rating of the most recent unsecured bond issuance is AAA, as rated by Standard and 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, 10 CFR Appendix E, Section III.A through F, describes the terms that are required in an 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;
- 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 Poor's or Moody's, 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; and
- 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.

## FINDINGS

The staff finds the language of the SG to comply 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 through F.

Relying upon the SG submission, the 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, CFO Letter, and Audited Financial Statements are consistent with NRC guidance and the requirements of 10 CFR Part 30, Appendix E, Section III. A through F.

Upon review of MIT's January 14, 2014, submittal, the staff finds that MIT's SG is acceptable.

## CONCLUSION

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

### Principal Reviewer

Reginald Augustus  
Kosmas Lois