

SAFETY EVALUATION REPORT

DOCKETS: 70-938, 50-020

LICENSES: SNM-986, R-37

LICENSEE: MASSACHUSETTS INSTITUTE OF TECHNOLOGY

SUBJECT: MASSACHUSETTS INSTITUTE OF TECHNOLOGY SELF-GUARANTEE
ANNUAL CERTIFICATION

BACKGROUND

Pursuant to Title 10 of the *Code of Federal Regulations* (10 CFR) Section 50.75, "Reporting and Recordkeeping for Decommissioning Planning," Subsection (e)(1)(iii)(C), and Appendix E to 10 CFR Part 30, "Criteria Relating to Use of Financial Tests and Self-Guarantee For Providing Reasonable Assurance of Funds For Decommissioning by Nonprofit Colleges, Universities, and Hospitals," Massachusetts Institute of Technology (MIT) provided a self-guarantee package to the U.S. Nuclear Regulatory Commission (NRC) to demonstrate financial assurance for decommissioning on September 30, 2015 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML15281A032). This submission was supplemented to include MIT's 2015 Treasurer's Report on February 16, 2016 (ADAMS No.: ML16047A153). This Safety Evaluation Review addresses both dockets for MIT, 0700-938 for the material license and 050-020, for the R-37 Research Reactor.

The self-guarantee (SG) method of assurance and associated terms were previously determined to be acceptable by the NRC on July 16, 2010, in a prior review entitled, "Acceptance of the Massachusetts Request to Change to a Self-Guarantee to Provide Decommissioning Funding Assurance for the Massachusetts Institute of Technology's Research Reactor" ADAMS Nos.: ML102090007 and ML102710002).

REGULATORY REQUIREMENTS

Nuclear facilities licensed under 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. 10 CFR Section 70.25 requires that non-profit college and university licensees that provide reasonable assurance of available funds for decommissioning costs through a 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 SG For Providing Reasonable Assurance of Funds For Decommissioning by Nonprofit Colleges, Universities, and Hospitals."

The requirements of 10 CFR Subsection 50.75(e)(1)(iii)(C), state, in part, that "...a guarantee of funds by the applicant or licensee may be used if the guarantee and test are as contained in Appendix E to 10 CFR Part 30." Appendix E to 10 CFR Part 30 establishes criteria for passing the financial test for the self-guarantee and establishes its terms. Regulatory guidance contained in NUREG-1757, Volume 3, Revision 1, "Consolidated Decommissioning Guidance: Financial Assurance, Recordkeeping, and Timeliness," states, in part, that a submittal used to satisfy the requirements of Appendix E to 10 CFR Part 30 can be verified through the use of the Chief Financial Officer's (CFO) Certification, the Independent Auditor's Report, and Financial Statements.

Enclosure

DISCUSSION

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.

The staff reviewed MIT's submittal pursuant to the elements specified in Appendix E to 10 CFR Part 30, including, the Financial Test, Additional Requirements, and Self-Guarantee requirements contained in Sections II(A)(1), II(C), and III, respectively, and the guidance contained in NUREG-1757. 10 CFR Part 30, 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;
- 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; 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.

In part, the licensee provided: a letter from MIT's CFO containing the self-guarantee financial test; an independent auditor's report confirming the CFO letter, and reconciling amounts, with the licensee's financial statements; and the licensee's audited financial statements for the most recent fiscal year. The licensee's initial submittal did not include the financial statements necessary for the staff to complete its review. The licensee supplemented its submittal with a 2015 Treasurer's Report on February 16, 2016 (ADAMS No.: ML16047A153). The staff notes that the self-guarantee agreement (originally signed duplicate) was submitted as required by the guidance (ADAMS Nos.: ML100070108, ML101930104, and ML101340587).

The staff also notes that Subsection II(C)(1) of Appendix E to 10 CFR Part 30 requires the licensee's independent certified public accountant to evaluate the licensee's off-balance sheet transactions and render an opinion on whether those transactions could adversely affect the

licensee's ability to pay for decommissioning costs. The guidelines established by the American Institute of Certified Public Accountants prohibit an accountant from rendering such an opinion. However, the Auditor's Report did state that the 2014 and 2015 financial statements were presented fairly in all material respects.

Additionally, 10 CFR 50.75(e)(1)(iii)(C) includes a provision, which states, in part, that a guarantee by the licensee may not be used in any situation in which the licensee has a parent company holding majority control of voting stock of the company. MIT does not have a parent company holding majority control of its voting stock. The staff's review confirmed that Standard and Poor's Financial Services LLC issued MIT a current rating for its most recent uninsured, uncollateralized, and unencumbered bond issuance of "AAA." The staff notes that when an obligor is rated "AAA," this means it has an extremely strong capacity to meet its financial commitments. "AAA" is the highest issuer credit rating assigned by Standard & Poor's. MIT also assessed the financial test presented in Appendix E to Part 30. Finally, MIT's decommissioning cost estimate was provided by Duke Engineering. This included an initial decommissioning cost estimate of \$23M in 2005 to decommission. MIT's method for updating the cost estimate appears reasonable, and provides a 2016 estimate of \$35.687M. As of the fiscal year ending on June 30, 2015, MIT possesses a positive tangible net worth in the amount of \$17.7 billion to decommission.

MIT has previously submitted both an SG agreement and Standby Trust Agreement (STA) that has been approved by NRC staff. Both agreements remain adequate to cover all decommissioning costs identified in MIT's latest SG submission.

FINDINGS

Based on its review, the staff finds that the licensee provided complete documentation, including: a letter from MIT's CFO containing the self-guarantee financial test; an independent auditor's report confirming the CFO letter, and reconciling amounts, with the licensee's financial statements; and the licensee's audited financial statements for the most recent fiscal year. In addition, the staff finds that the licensee does not have a parent company holding majority control of its voting stock and that the amount of the self-guarantee exceeds the required coverage level. In consideration of the exceptions noted above, the staff finds that the self-guarantee agreement meets the financial test criteria for a non-profit university that issues bonds, is sufficient for providing financial assurance, conforms to the guidance in NUREG-1757, and meets the requirements of 10 CFR Part 70.25, 10 CFR Part 50.75 and Appendix E of 10 CFR Part 30.

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 CFO letter, independent auditor's report, and previously submitted and approved SG agreement 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 Reviewers

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