

January 15, 2015

MEMORANDUM TO: Robert Johnson, Chief
Fuel Manufacturing Branch
Fuel Facility Licensing Directorate
Division of Fuel Cycle Safety, Safeguards
and Environmental Review
Office of Nuclear Material Safety and Safeguards

FROM: Christopher McKenney, Chief **/RA/**
Performance Assessment Branch
Division of Decommissioning, Uranium Recovery
and Waste Programs
Office of Nuclear Material Safety and Safeguards

SUBJECT: 2014 SAFETY EVALUATION REPORT INPUT WITH RESPECT
TO PENNSYLVANIA STATE UNIVERSITY SELF-GUARANTEE

Enclosed is our Safety Evaluation Report input with respect to the self-guarantee for Pennsylvania State University's Breazeale Nuclear Reactor and Special Nuclear Material licenses. Please contact Reginald Augustus if you have any specific questions regarding our input.

Docket Nos.: 050-0005, 70-113
License Nos.: R-2, SNM-95

Enclosure:
Pennsylvania State University Self-Guarantee Safety Evaluation Report Input

CONTACT: Reginald Augustus, NMSS/DUWP
(301) 415-0165

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SAFETY EVALUATION REPORT INPUT

DOCKETS: 50-0005, 70-113

LICENSES: R-2, SNM-95

LICENSEE: PENNSYLVANIA STATE UNIVERSITY (PSU)

SUBJECT: 2014 PSU SELF-GUARANTEE ANNUAL CERTIFICATION

BACKGROUND

In a letter dated December 20, 2013, Pennsylvania State University (PSU) submitted its annual certification of their self-guarantee (SG) for its Breazeale Nuclear Reactor (Docket 050-0005) and Special Nuclear Material (Docket 70-113) [ML14013A265]. On February 27, 2014, the Special Projects Branch (SPB) in the Division of Waste Management and Environmental Programs, Office of Federal and State Materials and Environmental Management Programs (FSME), submitted a memo to the Fuel Manufacturing Branch (FMB) in the Division of Fuel Cycle Safety and Safeguards, NMSS, stating that PSU's submittal was adequate to perform a detailed review [ML14051A667]. On April 22, 2014, SPB staff submitted a memo to the FMB staff recommending Requests for Additional Information (RAIs) [ML14107A320]. The RAI's were sent to the licensee. On May 5, 2014, a conference call was held between the NRC and the licensee to discuss and provide clarification for the RAIs. On May 15, 2014, a second conference call was held with the licensee to address unresolved issues with the RAI's. The RAI's were discussed, clarified, and subsequently accepted by the licensee. In a letter dated July 17, 2014, the licensee provided its responses to SPB staff's RAIs [ML14204A621]. On September 22, 2014, a second conference call was held between NRC staff, PSU, and PSU's auditor to continue discussions related to PSU's RAI responses and how to move forward to meet NRC regulatory requirements. On November 3, 2014, a third conference call was held between NRC staff and PSU to try and determine what PSU could provide NRC staff to meet regulatory requirements. PSU informed NRC staff that it would attempt to draft a response that would meet the intent of the relevant regulations. On December 16, 2014, a fourth conference call was held between NRC staff and PSU where the licensee agreed to provide documentation similar to an example NRC provided that meets the intent of the relevant regulations.

DISCUSSION

Regulatory Requirements

Nuclear facilities licensed under 10 CFR Part 50 and 70 are required to establish adequate financial assurance for decommissioning, decontamination and reclamation pursuant to 10 CFR 50.25, "Reporting and Recordkeeping for Decommissioning Planning" and 10 CFR 70.25, "Financial Assurance and Recordkeeping for Decommissioning" respectively.

10 CFR Part 50.25 and 70.25 require that non-profit College and University licensees, that utilize an SG to 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." PSU is a holder of a reactor license and a special nuclear material license and uses an SG for meeting the financial assurance requirements. This review pertains to SG for both of PSU's licenses.

Enclosure

Staff Review

Upon review of PSU's December 20, 2013 submittal, RAI responses, as detailed below, the PAB staff (staff) finds that PSU's SG is acceptable.

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, 10 CFR 50.75, and 10 CFR 70.25, as well as the U.S. Nuclear Regulatory Commission (NRC) guidance contained in NUREG-1757, Vol. 3, Rev. 1, Appendix A.9. PSU's December 20, 2013, submittal included:

- a SG;
- a letter from PSU's Associate Vice President for Finance and Corporate Controller and financial test;
- PSU's Audited Financial Statements; and
- a Standby Trust Agreement

The staff reviewed the December 20, 2013, submittal and initially found that additional information was needed to complete the review. By letter dated April 24, 2014, NRC staff provided its RAI to the licensee. Per discussions with the site's project manager and the licensee, NRC staff provided clarification as to the intent of the model language recommended per NUREG-1757, Vol.3, Rev. 1, and the request for the auditor's evaluation of off-balance sheet transactions. All parties determined that the RAI related to NUREG-1757's model language was reasonable and would be updated in the submission. The RAI related to the auditor's evaluation of the off-balance sheet transactions is required pursuant to 10 CFR Part 30, Appendix E.II.C. However, the American Institute of Certified Public Accountants prohibits any form of report or assurance on solvency matters. After numerous conference call discussions to determine what the licensee could provide NRC staff to meet the intent of the regulatory requirements, the NRC provided PSU with an example(s) of information provided by other licensees by their independent auditors that provided a calculation of the off-balance sheet transactions to determine a specific amount. This amount, along with the cost of decommissioning, and the bond rating, was used in the financial test to determine the licensee's "solvency," and hence, the ability to decommission. PSU subsequently provided NRC staff with similar language in a revised independent auditors report. The NRC staff reviewed the revised independent auditor's report and found that it met the intent of the regulation.

In order for PSU 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. PSU's December 20, 2013, 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 PSU 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 December 20, 2013, submittal, the letter from PSU's Associate Vice President for Finance and Corporate Controller 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 AA, as rated by Standard & Poor's. Therefore, PSU meets the requirement of 10 CFR Part 30, Appendix E, Section II.A.1. Thus, PSU meets the requirements of the Financial Test.

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; 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 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.
- F. A standby trust to protect public health and safety and the environment must be established for decommissioning costs before the self-guarantee agreement is submitted.

The staff finds the language of the SG to comply with the terms and conditions needed in NUREG-1757, Vol. 3, Rev. 1, Appendix A.9. Because the SG is consistent with the recommended language contained in NUREG -1757, Vol. 3, Rev. 1, 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 dated December 20, 2013 and responses to the RAIs, the staff finds that PSU meets the requirements of the Financial Test set forth in 10 CFR Part 30, Appendix E, Section II.A.1, the SG, Controller Letter, Audited Financial Statements, and Standby Trust Agreement 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 staff's review, as discussed above, PSU has demonstrated that (1) its financial condition meets the requirements of 10 CFR Part 30, Appendix E and (2) the language of the SG, Controller Letter, Audited Financial Statements, and Standby Trust Agreement submitted by cover letter dated December 20, 2013, are consistent with NRC guidance. Therefore, the staff finds that PSU's December 20, 2013 SG, RAIs, and supporting documentation are acceptable and are, therefore, approved.