



UNITED STATES  
NUCLEAR REGULATORY COMMISSION  
WASHINGTON, D.C. 20555-0001

May 25, 2016

MEMORANDUM TO: Robert Johnson, Chief  
Fuel Manufacturing Branch  
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: 2016 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 Special Nuclear Material license. Please contact Reginald Augustus if you have any specific questions regarding our input.

Docket No. 70-113  
License No. SNM-95

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

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

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| <b>DATE</b>   | 5/23/16   | 5/24/16  | 5/25/16   |

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## SAFETY EVALUATION REPORT INPUT

DOCKET: 70-113

LICENSE: SNM-95

LICENSEE: PENNSYLVANIA STATE UNIVERSITY

SUBJECT: 2016 PSU SELF-GUARANTEE ANNUAL CERTIFICATION

### BACKGROUND

By letter dated December 22, 2015, 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 (SNM) (Docket 70-113) [ML16005A047]. On February 22, 2016, the Performance Assessment Branch (PAB) in the Division of Decommissioning, Uranium Recovery and Waste Programs, Office of Nuclear Material Safety and Safeguards (NMSS), sent an email 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 technical review. On March 21, 2016, PAB staff sent an email to the FMB staff informing them that it had completed its technical review and found that the SG submission included all relevant elements per 10 CFR Part 70 and Appendix E to Part 30 and was therefore acceptable.

### DISCUSSION

#### 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 70.25, "Financial Assurance and Recordkeeping for Decommissioning."

10 CFR Part 70.25 requires 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 only to PSU's SNM license.

#### Staff Review

Upon review of PSU's December 22, 2015 submittal, the PAB staff (staff) finds that PSU's SG includes all necessary elements, therefore, it is acceptable.

Enclosure

### 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 the U.S. Nuclear Regulatory Commission (NRC) guidance contained in NUREG-1757, Vol. 3, Rev. 1, Appendix A.9. PSU's December 22, 2015, submittal included:

- An updated SG;
- a letter from PSU's Associate Vice President for Finance and Corporate Controller including the financial test;
- PSU's Audited Financial Statements; and
- Auditor's Special Report.

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 22, 2015 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 22, 2015, 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:

- 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;
- 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;
- 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;
- 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;
- 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

- 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. In addition, PSU previously provided a standby trust agreement (STA) [Attachment C of ML14015A387] that was reviewed and approved by NRC staff. However, the STA's Schedule A must be updated to reflect the latest cost estimate for the license. The licensee must provide a final revised version of the Schedule A form upon approval of its annual certification. 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, and the STA has previously been established and approved, pending the revised Schedule A form, the staff finds that the proposed SG and STA meet the requirements of 10 CFR Part 30, Appendix E, Section III.A, B, C, D, E, and F.

Relying upon the SG dated December 22, 2015, 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 submitted by cover letter dated December 22, 2015, and Standby Trust Agreement on file, pending the revision of its Schedule A form, are consistent with NRC guidance. Therefore, the staff finds that PSU's December 22, 2015 SG, and supporting documentation are acceptable.