



10 CFR 50.75(f)(1)

LR-N11-0240  
August 01, 2011

U.S. Nuclear Regulatory Commission  
ATTN: Document Control Desk  
Washington, DC 20555-0001

Salem Generating Station, Units 1 and 2  
Renewed Facility Operating License Nos. DPR-70 and DPR-75  
NRC Docket Nos. 50-272 and 50-311

Peach Bottom Atomic Power Station, Units 2 and 3  
Renewed Facility Operating License Nos. DPR-44 and DPR-56  
NRC Docket Nos. 50-277 and 50-278

Hope Creek Generating Station  
Renewed Facility Operating License No. NPF-57  
NRC Docket No. 50-354

**Subject:** Response to Request for Additional Information, 2011 NRC  
Decommissioning Funding Status Report

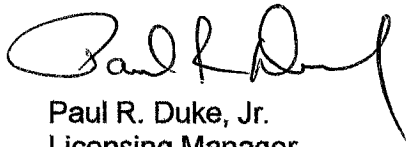
- References:**
- (1) LR-N11-0086, NRC Decommissioning Funding Status Report, dated March 31, 2011
  - (2) NRC Letter to Mr. Thomas Joyce, Request for Additional Information Regarding 2011 Decommissioning Funding Status Report, dated July 1, 2011

In Reference 1 PSEG Nuclear LLC (PSEG) submitted a status report of the decommissioning funds for the subject facilities. In Reference 2 the NRC provided PSEG a Request for Additional Information (RAI) regarding the Reference 1 report. Attachment 1 to this submittal provides the responses to the RAI.

There are no commitments contained in this letter.

If you have any questions or require additional information, please do not hesitate to contact Ms. Emily Maguire at (856)339-1023.

Sincerely,

A handwritten signature in black ink, appearing to read "Paul R. Duke, Jr.", written in a cursive style.

Paul R. Duke, Jr.  
Licensing Manager

cc: Mr. W. Dean, Administrator, Region I, NRC  
Mr. R. Ennis, Project Manager, NRC  
NRC Senior Resident Inspector, Salem  
NRC Senior Resident Inspector, Hope Creek  
Mr. P. Mulligan, Manager IV, NJBNE  
Mr. L. Marabella, Corporate Commitment Tracking Coordinator

### Response to Request for Additional Information

By letter dated March 31, 2011 (Agencywide Documents Access and Management System Accession No. ML 110900521), PSEG Nuclear LLC (PSEG or the licensee) submitted the 2011 Decommissioning Funding Status (DFS) Report for Hope Creek Generating Station (Hope Creek), Salem Nuclear Generating Station (Salem), Unit Nos. 1 and 2, and Peach Bottom Atomic Power Station (Peach Bottom), Units 2 and 3, as required by Title 10 of the Code of Federal Regulations (10 CFR) Section 50.75(f)(1).

#### RAI #1: Minimum Decommissioning Financial Assurance calculation

According to 10 CFR 50.75(f)(1), the amount provided in the DFS report should be "the amount of decommissioning funds estimated to be required under 10 CFR 50.75(b) and (c)."

In the DFS report dated March 31, 2011, PSEG reported an amount of decommissioning funds estimated to be required under 10 CFR 50.75(b) and (c) less than the amount calculated by the NRC staff for PSEG's portion of ownership for Salem Units 1 and 2 and greater than the amount calculated by the NRC staff for Hope Creek. The formulas for the factors used by the NRC staff can be found using NUREG-1307, Revision 14. For example, the calculations for the Labor and Energy Adjustment Factors can be found on pages 7 and 8 of NUREG-1307, Revision 14.

Provide the labor, energy, and burial factors used in your calculation of the minimum requirement for decommissioning financial assurance and, if necessary, a corrected submittal for that part of the DFS report.

#### PSEG Response

PSEG used the following factors in the calculation of the minimum decommissioning funding requirements:

Plant	Labor	Energy	Burial
Hope Creek	2.454	2.319	12.54
Salem	2.454	2.263	12.28
Peach Bottom	2.454	2.319	12.54

The Labor Adjustment Factor was computed in accordance with NUREG-1307, section 3.1; however, the Northeast Region Employment Cost Index (ECI) for 4th Quarter 2010 was used instead of the ECI for 1st Quarter 2010.

The Energy Adjustment Factor was computed in accordance with NUREG-1307, section 3.2; however, the producer price indexes for 4th Quarter 2010 were used instead of the indexes for May 2010.

The Burial Factors for Hope Creek and Salem were taken from NUREG-1307, Table 2.1, for "Atlantic Compact, Direct Disposal with Vendors." The Burial Factor for Peach Bottom was taken from NUREG-1307, Table 2.1, for "Generic LLW Disposal Site, Direct Disposal with Vendors."

**RAI #2: Citation for real rate of returns**

As stated in 10 CFR 50.75(f)(1):

the information in [the DFS] report must include [...] the assumptions used regarding rates of escalation in decommissioning costs, rates of earnings on decommissioning funds, and rates of other factors used in funding projections ...

In the DFS report dated March 31, 2011, PSEG stated that for the purpose of determining if the NRC's minimum requirements are met, PSEG has used an annual rate of return of 2%, as permitted by 10 CFR 50.75(e)(1)(ii).

Provide the citation by the regulatory entity (e.g., an Order by the rate-regulatory authority) that allows for the assumptions used regarding rates of escalation in decommissioning costs, rate of earnings on decommissioning funds and rates of other factors assumed in your DFS report for [Hope Creek, ] Peach Bottom Units 2 and 3 and Salem Unit Nos. 1 and 2.

**PSEG Response**

PSEG is no longer under the jurisdiction of a rate-setting authority, and therefore utilizes the rate of earnings that 10 CFR 50.75(e)(1)(i) allows when a higher rate has not been authorized by a rate-making authority. In accordance with the provisions of 10 CFR 50.75(e)(1)(ii), PSEG has taken credit for earnings on decommissioning funds using a 2 percent annual real rate of return for Hope Creek, Peach Bottom Units 2 and 3, and Salem Unit Nos. 1 and 2.

**RAI #3: Site-Specific Cost Estimate**

Appendix A to PSEG's DFS report dated March 31, 2011, shows that the amount of years remaining to start decommissioning is different than the remaining years for operations for each of the units (e.g. Hope Creek has 15.32 remaining years to end of operating license life and 58.8 remaining years to start of decommissioning). This difference appears to be based on an assumption of a 40-year SAFESTOR period plus 3.5 years of dismantlement as shown in Note 3 of Appendix A.

Although submittal of a site-specific cost estimate is not explicitly stated in 10 CFR 50.75(c)(1)(i) and (ii), if the information in the DFS report is based on a site-specific cost estimate, the NRC staff requests that this information be provided for Hope Creek, Salem Unit Nos. 1 and 2 and Peach Bottom Units 2 and 3 so that the staff can perform its independent analysis. If the cost estimate was previously submitted to NRC, then provide a reference to its submittal. The site-specific cost estimate should include a summary schedule of annual expenses, projected earnings, and end-of-year fund balances, expressed in 2010 dollars.

**PSEG Response**

A site-specific cost estimate for Hope Creek was submitted on June 23, 2009 (ADAMS Accession No. ML091820277).

PSEG will provide an update to the Hope Creek site-specific cost estimate expressed in 2010 dollars. PSEG plans to submit the update by September 15, 2011.

For Salem Unit Nos. 1 and 2 and Peach Bottom Units 2 and 3, the projected fund value at end of operating life (EOL) exceeds the minimum required amount, without accounting for SAFESTOR. However, PSEG will provide site-specific cost estimates for Salem Unit Nos. 1 and 2 and Peach Bottom Units 2 and 3 by September 15, 2011.

**RAI #4: Amounts accumulated**

The provisions of 10 CFR 50.75(f)(1) and (2) require the licensee to report the amount of funds accumulated to the end of the calendar year preceding the report.

In the DFS report dated March 31, 2011, PSEG did not state if the amount of decommissioning funds accumulated was an after-tax amount.

Provide the after-tax amount of funds accumulated through December 31, 2010.

**PSEG Response**

The table below provides the after-tax market values for the trust as of December 31, 2010.

Plant	After-tax amount of funds accumulated through December 31, 2010 (\$ Thousands)
Hope Creek	390,030
Salem Unit 1	251,954
Salem Unit 2	230,825
Peach Bottom Unit 2	212,694
Peach Bottom Unit 3	215,347
Total	1,300,850

The after-tax values were developed by applying a 20% federal tax rate on the qualified unrealized gain position as of December 2010. No adjustment was made to the non-qualified component of the trust as all tax payments are made by the Company and not the trust.