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**Submitted pursuant
to 10 CFR 2.390**

U. S. Nuclear Regulatory Commission
Document Control Desk
Mail Stop OP1-17
Washington, DC 20555

**SUSQUEHANNA STEAM ELECTRIC STATION
DECOMMISSIONING REPORT OF
FINANCIAL ASSURANCE
PLA-6491**

**Docket Nos. 50-387
and 50-388**

- Reference:
- 1) PLA-5979, Mr. B. T. McKinney (PPL) to Document Control Desk (USNRC),
"Decommissioning Report of Financial Assurance Supplemental Information,"
dated November 7, 2005.
 - 2.) PLA-6110, Mr. B. T. McKinney (PPL) to Document Control Desk (USNRC),
"Application for Renewed Operating License Numbers NPF-14 and NPF-22,"
dated September 13, 2006.

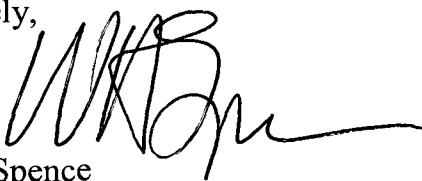
This letter provides decommissioning information for the PPL Susquehanna, LLC (PPL) ninety percent interest in Susquehanna Unit 1 and Unit 2 (SSES) as required by 10 CFR 50.75 "Reporting and Recordkeeping for Decommissioning Planning," section (f)(1).

Attachment 1 contains the PPL decommissioning funding status report at December 31, 2008, submitted biennially to comply with 10 CFR 50.75(f)(1).

Attachment 2 contains SSES site-specific proprietary information and therefore PPL requests that this information be withheld from public disclosure pursuant to 10 CFR §9.17(a)(4) and the policy reflected in 10 CFR §2.390, as described in the enclosed Affidavit.

If you have any questions regarding the decommissioning report, please direct them to Mr. D. L. Filchner - Nuclear Regulatory Affairs, at (610) 774-7819.

Sincerely,


W. H. Spence

A001
NRR

- Attachments: 1. NRC Decommissioning Funding Status Report December 31, 2008
2. Proprietary Information - Affidavit and
Site – Specific Decommissioning Cost Analysis Schedules

Copy: NRC Region I
Mr. R. Janati, DEP/BRP
Mr. F. W. Jaxheimer, NRC Sr. Resident Inspector
Mr. B. K. Vaidya, NRC Project Manager

**Attachment 1 to PLA-6491
NRC Decommissioning Funding Status Report
December 31, 2008**

NRC Decommissioning Funding Status Report

December 31, 2008

PPL Susquehanna, LLC Susquehanna Steam Electric Station

PPL Susquehanna, LLC (PPL) hereby submits this Decommissioning Report in compliance with 10 CFR 50.75(f)(1) for its 90% share of Susquehanna (SSES) Unit 1 and Unit 2.

PPL has analyzed its current funding levels and planned contributions for both SSES units and concluded that these funding levels and planned contributions will be sufficient to pay for the decommissioning costs of each unit at the time permanent termination of operations is expected for each unit, when earnings and inflation are taken into account, assuming PPL elects to pursue a SAFSTOR option.

The SAFSTOR decommissioning option was developed as part of a SSES Site-Specific Decommissioning Cost Analysis and assumes site license termination 60 years after permanent cessation of operation of Unit 1. After final shutdown of Unit 1, the sequence of events leading to termination of the 10 CFR Part 50 license is assumed to be as follows:

- 1.5 year transition into decommissioning and preparation for safe storage
- 52 year period of dormancy
- 1.5 year period of site reactivation and preparation for decommissioning
- 5 year period of decontamination and dismantlement culminating in license termination.

These durations are rounded slightly and are for SSES Unit 1. The SSES Unit 2 durations are slightly less in some cases because of the later expected shutdown (about 20 months after Unit 1). However, license termination for both units still occurs 60 years after Unit 1 shutdown.

In 2006, PPL applied to the NRC for 20-year license renewals for each of the Susquehanna units to extend their operating license expiration dates from 2022 to 2042 for Unit 1 and from 2024 to 2044 for Unit 2 (see Reference 2). A final decision on the license renewal is expected prior to the end of 2009.

**Information is submitted to provide
Financial Assurance**

	<u>Unit # 1</u>	<u>Unit #2</u>
1. The minimum amount of decommissioning funds estimated to be required pursuant to 10 CFR 50.75 (b) and (c).		
At December 31, 2008	\$515,038,500	\$515,038,500
PPL Susquehanna LLC's calculation of the NRC minimum formula is reflected in Exhibit 1 (behind this Attachment).		
2. The amount accumulated at the end of the calendar year preceding the date of the report for items included in 10 CFR 50.75 (b) and (c).		
Market Value at December 31, 2008	\$211,549,994	\$234,386,430
3. See Exhibit 2 (behind this Attachment) for a schedule of the annual amounts remaining to be collected.		
4. The assumptions used regarding escalation in decommissioning cost, rates of earnings on decommissioning funds, and rates of other factors used in funding projections.		
Estimated Inflation rate for decommissioning costs	4%	4%
Estimated Earnings rates on decommissioning funds	7.5%	7.5%
Rates of other factors used in funding projections	None	None
The Inflation and Earnings Rate are based on an order entered by the Pennsylvania Public Utility Commission (Pa. PUC) on September 27, 1995 at Docket No. R-00943271.		
5. Any power sale contracts upon which licensee is relying to provide financial assurance.	None	None
6. Modifications to licensee's method of providing financial assurance since previous report.	None	None
7. Material changes to trust agreement.	None	None

Calculation of Escalation Factors

Used in Computation of Minimum Financial Assurance Amount for Decommissioning Susquehanna Steam Electric Station Units 1 and 2

Boiling Water Reactor (BWR)
Escalation Factor

$$\text{Formula - } 0.65(L) + 0.13(E) + 0.22(B)$$

$$\text{Escalation} = (.65 \times 2.365) + (.13 \times 1.829) + (.22 \times 11.198)$$

$$\text{Escalation} = (1.537 + 0.238 + 2.464) = 4.239$$

(L) - Labor - (Bureau of Labor Statistics, Table 6, Compensation, Employment Cost Index, for total compensation, private industry workers, by bargaining status, region and area size)

Northeast region - December 2008 Index Number	109.5
December 2005 Index Number	100.0
December 2005 base	2.16

$$L = \frac{109.5}{100.0} \text{ times } 2.16 \text{ Equals } 2.365$$

(E) - Energy - (Producer Price Index Commodities, Series ID: WPU0543 and WPU0573)

$$E = (.54P + .46F)$$

$$E = (.54 \times 1.669) + (.46 \times 2.018)$$

$$E = 0.901 + .928 = 1.829$$

P - Industrial Power, 500 kW demand - (Commodity 0543)

December 2008 Index Number	190.6
January 1986 Index Number	114.2 (1)

$$P = \frac{190.6}{114.2} \text{ equals } 1.669$$

F - Light fuel oils - (Commodity 0573)	
December 2008 Index Number	165.5
January 1986 Index Number	82.0

$$F = \frac{165.5}{82.0} \text{ equals } 2.018$$

(B) Waste Burial

NUREG - 1307, Rev. 13, "NRC Report on Waste Burial Charges"

Table 2.1

Generic LLW Direct Disposal with Vendors 11.198

- (1) Represents the national base value of P at January 1986. The base value of P is no longer determined on a regional basis.

PPL Susquehanna, LLC
Computation of Minimum Financial Assurance Amount for Decommissioning
Susquehanna Steam Electric Station
Units 1 and 2

	<u>Unit 1</u>	<u>Unit 2</u>
Base amount for BWR greater than 3,400 MWt = \$135 million The Power Level of Unit 1 = 3,952 MWt and Unit 2 = 3,952 MWt	\$135,000,000	\$135,000,000
Ownership Percentage	90%	90%
Base Amount per Unit	\$121,500,000	\$121,500,000
Escalation Factor	4.239	4.239
Escalated Amount per Unit	\$515,038,500	\$515,038,500
Total Escalated Amount (Unit 1 + Unit 2)	\$1,030,077,000	

**PPL Nuclear Decommissioning Trust
Expected Contributions**

	<u>Unit 1</u>	<u>Unit 2</u>	<u>Grand Total</u>
2009	5,441,813	8,066,330	13,508,143