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MAR 21 2003

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

**SUSQUEHANNA STEAM ELECTRIC STATION
DECOMMISSIONING REPORT OF
FINANCIAL ASSURANCE
PLA-5596**

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

In accordance with 10 CFR 50.75(f)(1), attached please find the PPL Susquehanna, LLC decommissioning report of financial assurance for our ninety percent interest in Susquehanna Unit 1 and Unit 2.

If you have any questions regarding our decommissioning report, please direct them to Mr. R. R. Sgarro, Manager - Nuclear Regulatory Affairs, at (610) 774-7552.

Sincerely,

A handwritten signature in black ink, appearing to read "Bryce L. Shriver".

B. L. Shriver

Attachment: Decommissioning Report

copy: NRC Region I
Mr. R. V. Guzman, NRC Project Manager
Mr. S. Hansell, NRC Sr. Resident Inspector
Mr. R. Janati, DEP/BRP

A001

Add: Michael
Dusanowsky

**NRC Decommissioning Funding Status Report
December 31, 2002**

**PPL Susquehanna, LLC
Susquehanna Steam Electric Station**

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

PPL Susquehanna has analyzed its current funding levels and planned contributions for both Unit 1 and Unit 2 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, if at that time PPL Susquehanna elects to pursue a SAFSTOR option. In conducting this analysis, PPL Susquehanna used a 2002 Site Specific Cost Estimate developed by TLG Services, Inc. The analysis and cost estimates account for estimated costs throughout the periods of safe storage, final dismantlement and license termination. This analysis is confidential and proprietary to PPL Susquehanna, but can be made available for inspection upon request.

**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 10CFR50.75 (b) and (c). | | |
| At December 31, 2002 | \$405,567,000 | \$405,567,000 |
| PPL Susquehanna LLC's calculation of the NRC minimum formula is reflected in Exhibit 1. | | |
| 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 Dec. 31, 2002 | \$141,978,996 | \$145,081,301 |
| 3. See Exhibit 2 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 One And Two**

Boiling Water Reactor (BWR)
Escalation Factor

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

$$\text{Escalation} = (.65 \times 1.912) + (.13 \times 1.123) + (.22 \times 8.860)$$

$$\text{Escalation} = (1.24280 + 0.14599 + 1.94920) = 3.33800$$

(L) - Labor - (Bureau of Labor Statistics, Table 4, Compensation, Employment Cost Index, for total compensation, private industry workers, by bargaining status, region and area size)

| | |
|---|-------|
| Northeast region - August 2002 Index Number | 249.6 |
| January 1986 Index Number | 130.5 |

$$L = \frac{249.6}{130.5} \text{ equals } 1.912$$

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

$$\begin{aligned} E &= (.54P + .46F) \\ E &= (.54 \times 1.270) + (.46 \times 0.95) \\ E &= 0.68580 + 0.43700 = 1.123 \end{aligned}$$

| | |
|--|-----------|
| P - Industrial Power, 500 kW demand - (Commodity 0543) | |
| August 2002 Index Number | 145.0 |
| January 1986 Index Number | 114.2 (1) |

$$P = \frac{145.0}{114.2} \text{ equals } 1.270$$

F - Light fuel oils - (Commodity 0573)
August 2002 Index Number 77.9
January 1986 Index Number 82.0

$$F = \frac{77.9}{82.0} \text{ equals } 0.95$$

(B) Waste Burial

NUREG - 1307, Rev. 10, "NRC Report on Waste Burial Charges"
Table 2.1
South Carolina Factor 8.860

- (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 One and Two

| | <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 and Unit 2 are = 3,489 MWt | 135,000,000 | 135,000,000 |
| Ownership percentage | 90% | 90% |
| Base amount per unit | 121,500,000 | 121,500,000 |
| Escalation Factor | 3.338 | 3.338 |
| Escalated Amount per Unit | 405,567,000 | 405,567,000 |
| Total Escalated Amount (Unit 1 + Unit 2) | | 811,134,000 |

**PPL Nuclear Decommissioning Trust
Expected Contributions**

| | <u>Unit 1</u> | <u>Unit 2</u> | <u>Grand Total</u> |
|-----------|---------------|---------------|--------------------|
| 2003 | \$8,776,504 | \$13,009,304 | \$21,785,808 |
| 2004 | 7,566,986 | 11,216,454 | 18,783,440 |
| 2005 | 7,053,960 | 10,456,005 | 17,509,965 |
| 2006 | 6,540,936 | 9,695,554 | 16,236,490 |
| 2007 | 6,027,912 | 8,935,104 | 14,963,016 |
| 2008 | 5,514,888 | 8,174,654 | 13,689,542 |
| 2009 | 5,001,834 | 7,414,154 | 12,415,988 |
| 2003-2009 | \$46,483,020 | \$68,901,229 | \$115,384,249 |