

Brad Berryman
Site Vice President

Susquehanna Nuclear, LLC
769 Salem Boulevard
Berwick, PA 18603
Tel. 570.542.2904 Fax 570.542.1504
Brad.Berryman@TalenEnergy.com

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ENERGY

MAR 30 2017

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

10 CFR 50.75

**SUSQUEHANNA STEAM ELECTRIC STATION
NRC DECOMMISSIONING FUNDING STATUS REPORT
PLA-7584**

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

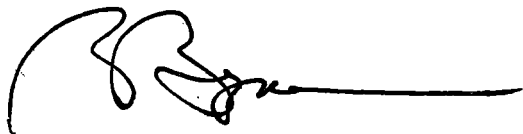
This letter provides decommissioning information for the Susquehanna Nuclear, LLC's ninety percent interest in Susquehanna Steam Electric Station (SSES) Unit 1 and Unit 2 as required by 10 CFR 50.75, "Reporting and Recordkeeping for Decommissioning Planning," Section (f)(1).

The Attachment to this letter contains the Susquehanna decommissioning funding status report for December 31, 2016, submitted biennially to comply with 10 CFR 50.75(f)(1).

If you have any questions regarding the decommissioning report, please contact Mr. Jason Jennings, Manager of Nuclear Regulatory Affairs, at (570) 542-3155.

There are no regulatory commitments identified in this letter.

Sincerely,



Brad Berryman
Site Vice President

Attachment: NRC Decommissioning Funding Status Report December 31, 2016

Copy: NRC Region I
Ms. T. E. Hood, NRC Project Manager
Ms. L. H. Micewski, NRC Sr. Resident Inspector
Mr. M. Shields, PA DEP/BRP

ADD
NRR

Electronic Copy:

S. A. Bella

B. Berryman

R. P. Carroll

K. A. Durn

N. E. Fairchild (NSRB)

R. J. Franssen

J. R. Jennings

M. Krick

C. E. Manges

D. D. Obie

V. Powers

T. J. Solt

DCS

GENPL4

**Attachment to PLA-7584
NRC Decommissioning Funding Status Report
December 31, 2016**

NRC Decommissioning Funding Status Report

December 31, 2016

**Susquehanna Nuclear, LLC
Susquehanna Steam Electric Station**

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

Susquehanna has analyzed its current funding levels for both SSES units and concluded that these funding levels will be sufficient to pay for the decommissioning costs of each unit at the time permanent termination of operations is expected for each unit, consistent with the NRC prescribed minimum set forth in 10 CFR 50.75(c).

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, 2016.	\$600,088,500	\$600,088,500
Susquehanna Nuclear, 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, net of taxes paid on realized gains and losses, for items included in 10 CFR 50.75 (b) and (c).		
Market Value at December 31, 2016.	\$488,857,613	\$544,458,258
3. Annual amounts remaining to be collected.	\$0	\$0
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	0%	0%
Estimated Real Earnings rate on decommissioning funds per 10 CFR 50.75(e)(1)(ii) which are credited up to the time of permanent termination of operations along with a pro-rata credit during the dismantlement period.	2.0%	2.0%
Rates of other factors used in funding projections	None	None
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

**Information is submitted to provide
Financial Assurance**

	<u>Unit # 1</u>	<u>Unit #2</u>
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

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

$$\text{Escalation} = (.65 \times 2.780) + (.13 \times 1.870) + (.22 \times 13.132)$$

$$\text{Escalation} = (1.807 + .243 + 2.889) = 4.939$$

(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 2016 Index Number	128.7
December 2005 Index Number	100.0
December 2005 Base	2.16

$$L = \frac{128.7}{100.0} \text{ times } 2.16 \text{ Equals } 2.780$$

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

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

$$E = (.54 \times 1.883) + (.46 \times 1.854)$$

$$E = 1.017 + .853 = 1.870$$

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

December 2016 Index Number	215.0
January 1986 Index Number	114.2 (1)

$$P = \frac{215.0}{114.2} \text{ equals } 1.883$$

F - Light Fuel Oils - (Commodity 0573)	
December 2016 Index Number	152.0
January 1986 Index Number	82.0

$$F = \frac{152.0}{82.0} \text{ equals } 1.854$$

(B) Waste Burial

NUREG - 1307, Rev. 16, "NRC Report on Waste Burial Charges"

Table 2.1

Generators Located in the Unaffiliated States 13.132

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

Susquehanna Nuclear, 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	4.939	4.939
Escalated Amount per Unit	\$600,088,500	\$600,088,500
Total Escalated Amount (Unit 1 + Unit 2)	\$1,200,177,000	