



A Touchstone Energy® Cooperative



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June 15, 2011

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

SUSQUEHANNA STEAM ELECTRIC STATION UNITS 1 AND 2
REQUEST FOR ADDITIONAL INFORMATION (RAI) Docket Nos. 50-387 and 50-388

In response to your request for additional information to Allegheny Electric Cooperative, Inc., (Allegheny), dated May 24, 2011, enclosed you will find our detailed reply. Please note for your records, that due to my forthcoming retirement, all future correspondence on this matter should be directed to the attention of Craig A. Colantoni, Vice President, Finance & Accounting.

Sincerely,

A handwritten signature in black ink, appearing to read 'Kenneth W. Kammeier'.

Kenneth W. Kammeier
Vice President

Attachment #1 - Responses to NRC RAI dated May 24, 2011
Attachment #2 - Revised Decommissioning Funding Status (DFS) Report
Exhibit #1 - Revised Calculation of Escalation Factors
Exhibit #2 - AEC NDT Expected Future Contributions
Exhibit #3 - NRC Request for Additional Information (RAI) dated May 24, 2011

cc: NRC Region I
Mr. D. J. Allard, PA DEP
Mr. B. K. Vaidya, NRC Project Manager
Mr. S. Hansell, NRC Sr. Resident Inspector
Mr. M. Dusaniwskyj, NRC - OWF

ADD
NRR

RAI #1 Minimum DFA calculation:

Various regional inflation factors were not available in final form for December 2010 during the drafting of our Decommissioning Funding Status (DFS) dated April 11, 2011. The escalation factors originally submitted have been adjusted as set forth in Exhibit #1 as attached herein. The revised factors resulted in a 1 percent increase to the current estimated minimum decommissioning requirements, however, the overall strategy, expected future contributions and results of trust earnings did not change significantly from the original DFS filing. After applying Allegheny's assumptions as originally submitted to the revised minimum decommissioning requirements on Exhibit #1, Allegheny's plan achieves adequate funding for the decommissioning cost many years prior to end of the license lives for Unit #1 and Unit #2 of 2042 and 2044 respectively.

RAI #2 Citation for real rate of returns:

Allegheny Electric Cooperative, Inc. is incorporated in the Commonwealth of Pennsylvania as a Non-Profit Electric Cooperative Corporation. As such, Allegheny is excluded from regulation under the Pennsylvania Public Utility Commission. Allegheny's Board of Directors has full and exclusive authority to establish wholesale rates that are binding to its customers. Allegheny has "All-Requirements Contracts" with each of its 14 rural electric distribution cooperative customers. Additionally, Allegheny's total energy sales approximate 3,263,000 MWh and therefore Allegheny is not subject to regulation under the Federal Energy Regulatory Commission (FERC).

The rates of escalation in the April 11, 2011 filing were determined by Allegheny's management based on a strategy and series of policies previously approved by the Allegheny Board of Directors. The estimated inflation rate for decommissioning costs in the 2011 DFS filing are based on a historical comparison of site-specific studies that were completed by PPL Susquehanna, LLC as the majority owner and exclusive operator of the Susquehanna Steam Electric Station Units #1 and #2. The site specific study completed in 2002 was compared to the site specific study completed in 2010. The annualized rate of inflation approximated 4 percent. Based on numerous observations related to recent trends in energy as well as indications that waste burial costs may have significant upward pressure, management determined that an inflation rate of 5 percent was more appropriate looking forward.

The estimated rate of earnings on decommissioning funds as submitted was 6.5 percent. The after-tax rate of return on Allegheny's trust fund since the trust's inception in 1990 is approximately 7.5 percent. While such earnings may be achievable in the future, Allegheny's management believes that the turmoil in the financial markets that began during 2007 may continue into the future. With the existing target allocation of trust fund investments at 50 percent equity and 50 percent fixed income, Allegheny believes that it has a well diversified portfolio. The historical return of 7.5 percent was decreased to 6.5 percent due to an extended period of low returns and slow domestic

growth. As such, the real rate of return after inflation of 5 percent and income tax is 1.5 percent, and considerably more conservative than the allowed 2 percent provided for in the regulations.

There were no other rates or factors used in the funding projections as submitted in the Decommissioning Funding Status report as submitted on April 11, 2011.

RAI #3 After-tax decommissioning funds as of December 31, 2010:

The amount of funds reported in the DFS submitted on April 11, 2011 are after-tax amounts accumulated through December 31, 2010.

**Revised NRC Decommissioning Funding Status Report
December 31, 2010**

**Allegheny Electric Cooperative, Inc.
Susquehanna Steam Electric Station**

Allegheny Electric Cooperative (AEC) hereby submits this Decommissioning Report in compliance with 10 CFR 50.75(f)(1) for its 10 percent share of Susquehanna Units 1 and 2.

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, 2010 AEC's calculation of the NRC minimum formula is reflected in Exhibit 1.	\$62,842,500	\$62,842,500
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, 2010	\$23,812,636	\$23,812,636
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 Estimated Earnings rates on decommissioning funds Rates of other factors used in funding projections AEC sets its own rates and believes the above assumptions are reasonable.	5% 6.5% (None)	5% 6.5% (None)
5.	Any power sale contracts upon which licensee is relying to provide financial assurance. AEC is the wholesale power supplier for the 14 rural electric cooperatives in Pennsylvania and New Jersey. AEC has all requirements contracts with its 14 member distribution cooperatives, which is the source for funding the Trust Fund.	(see below)	(see below)
6.	Modifications to licensee's method of providing financial assurance since previous report.	None	None
7.	Material changes to trust agreement.	None	None

**Revised Calculation of Escalation Factors
Used in Computation of Minimum Financial Assurance
Amount for Decommissioning
Susquehanna Steam Electric Station Units 1 and 2
June 15, 2011**

Boiling Water Reactor (BWR)
Escalation Factor

Formula - $0.65(L) + 0.13(E) + 0.22(B)$

Escalation = $(0.65 \times 2.454) + (0.13 \times 2.319) + (0.22 \times 12.540)$

Escalation = $(1.595 + 0.301 + 2.759) = 4.655$

(L) - Labor

NUREG - 1307, Rev.14, Table 3.2 Regional Factors for Labor Cost Adjustment -

To calculate the current labor adjustment factor (Lx) for a particular region, two numbers are needed: a base labor adjustment factor and the current Employment Cost Index (ECI). The base labor adjustment factors are shown in column 2 of Table 3.2, and the current employment cost indexes are shown in column 3. For the Northeast region,

$$Lx/113.6 = 2.16/100 \text{ or}$$

$$Lx = 2.16 \times 113.6/100 = 2.454$$

(E) - Energy Adjustment Factor

NUREG - 1307, Rev.14, Section 3.2 Energy Adjustment Factors - The adjustment factor for energy, Ex, is a weighted average of two components, namely, industrial electric power, Px, and light fuel oil, Fx. For the reference BWR it is: $Ex \text{ (BWR)} = 0.54Px + 0.46Fx$. Updating the components from the provided references results in for the reference BWR:

$$Ex \text{ (BWR)} = [(0.54 \times 1.675) + (0.46 \times 3.074)] = 2.319$$

(B) - Waste Burial

NUREG - 1307, Rev.14, Table 2.1 - Values of Bx as a Function of LLW Burial Site, Waste Vendor, and Year: Bx Values for Generic LLW Disposal Site

$$\text{Direct Disposal with Vendors (BWR): } 12.540$$

**Revised Computation of Minimum Financial Assurance Amount
for Decommissioning Susquehanna Steam Electric Station Units 1 and 2
June 15, 2011**

	Unit 1	Unit 2
Base amount for BWR greater than 3,400 MWt = \$135 million The Power Level of Unit 1 and Unit 2 is = 3,489 MWt	\$135,000,000	\$135,000,000
Ownership percentage	10%	10%
Base amount per unit	\$13,500,000	\$13,500,000
Escalation Factor	4.655	4.655
Escalated Amount per Unit	\$62,842,500	\$62,842,500
Total Escalated Amount (Unit 1 + Unit 2)	\$125,685,000	

AEC Nuclear Decommissioning Trust

Year	Expected Contributions		Total
	Unit 1	Unit 2	
2011	\$1,297,000	\$1,297,000	\$2,594,000
2012	\$1,348,880	\$1,348,880	\$2,697,760
2013	\$1,402,835	\$1,402,835	\$2,805,670
2014	\$1,458,949	\$1,458,949	\$2,917,897
2015	\$1,517,307	\$1,517,307	\$3,034,613
2016	\$1,577,999	\$1,577,999	\$3,155,998
2017	\$1,641,119	\$1,641,119	\$3,282,238
2018	\$1,706,764	\$1,706,764	\$3,413,527
2019	\$1,775,034	\$1,775,034	\$3,550,068
2020	\$1,846,035	\$1,846,035	\$3,692,071
2021	\$1,919,877	\$1,919,877	\$3,839,754
2022	\$1,996,672	\$1,996,672	\$3,993,344
2023	\$2,076,539	\$2,076,539	\$4,153,078
2024	\$2,159,600	\$2,159,600	\$4,319,201
2025	\$2,245,984	\$2,245,984	\$4,491,969
2026	\$2,335,824	\$2,335,824	\$4,671,647
2027	\$2,429,257	\$2,429,257	\$4,858,513
2028	\$2,526,427	\$2,526,427	\$5,052,854
2029	\$2,627,484	\$2,627,484	\$5,254,968
2030	\$2,732,583	\$2,732,583	\$5,465,167
2031	\$2,841,887	\$2,841,887	\$5,683,773
2032	\$2,955,562	\$2,955,562	\$5,911,124
2033	\$3,073,785	\$3,073,785	\$6,147,569
2034	\$3,196,736	\$3,196,736	\$6,393,472
2035	\$3,324,606	\$3,324,606	\$6,649,211
2036	\$3,457,590	\$3,457,590	\$6,915,179
2037	\$3,595,893	\$3,595,893	\$7,191,787
2038	\$3,739,729	\$3,739,729	\$7,479,458
2039	\$3,889,318	\$3,889,318	\$7,778,636
2040	\$4,044,891	\$4,044,891	\$8,089,782
2041	\$4,206,687	\$4,206,687	\$8,413,373
2042	\$4,374,954	\$4,374,954	\$8,749,908
2043	\$0	\$4,549,952	\$4,549,952
2044	\$0	\$0	\$0
2011-2044	\$81,323,805	\$85,873,757	\$167,197,562



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

MAY 26 2011

May 24, 2011

Mr. Kenneth W. Kammeier
Allegheny Electric Cooperative, Inc.
212 Locust St.
P. O. Box 1266
Harrisburg, PA 17108-1266

SUBJECT: SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2 - REQUEST
FOR ADDITIONAL INFORMATION RE: 2011 DECOMMISSIONING FUNDING
STATUS REPORT (TAC NOS. ME5542 AND ME5543)

Dear Mr. Kammeier:

By letter dated April 11, 2011, Allegheny Electric Cooperative, Inc. (AEC) submitted "NRC Decommissioning Funding Status Report, December 31, 2010, for the Susquehanna Steam Electric Station, Units 1 and 2.

The Nuclear Regulatory Commission staff has been reviewing the submittal and has determined that additional information is needed to complete its review. The specific questions are found in the enclosed request for additional information. AEC should provide a response within 30 days from the date of this letter.

Sincerely,

A handwritten signature in black ink, appearing to read "B. Vaidya", with a horizontal line underneath.

Bhalchandra K. Vaidya, Project Manager
Plant Licensing Branch I-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket Nos. 50-387 and 50-388

Enclosure:
As stated

cc w/encl: Distribution via Listserv

REQUEST FOR ADDITIONAL INFORMATION (RAI)
REGARDING
NRC DECOMMISSIONING FUNDING STATUS REPORT
DECEMBER 31, 2011
ALLEGHENY ELECTRIC COOPERATIVE FOR
SUSQUEHANNA STEAM ELECTRIC STATION, UNITS 1 AND 2
DOCKET NOS. 50-387 AND 388

This RAI is in response to the Allegheny Electric Cooperative's (AEC) 2011 Decommissioning Funding Status (DFS) Report. By letter dated April 11, 2011 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML11109A046), PPL submitted to the Nuclear Regulatory Commission (NRC) the 2011 DFS Report for Susquehanna Steam Electric Station, Units 1 and 2 (SSES 1 and 2), as required under Title 10 of the *Code of Federal Regulations* (10 CFR) 50.75(f)(1). AEC should provide a response within 30 days from the date of this letter.

RAI #1: Minimum DFA calculation:

Provide the minimum decommissioning funding assurance calculation by using current escalation factors for labor and energy from the U.S. Department of Labor, Bureau of Labor Statistics and, if necessary, a corrected submittal for that part of the DFS Report.

On March 29, 2011, AEC 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. Also, AEC used the factors for labor and energy taken from NUREG-1307, Rev. 14, "Report on Waste Burial Charges: Changes in Decommissioning Waste Disposal Costs at Low-Level Waste Burial Facilities."

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)."

As stated under 10 CFR 50.75(c)(2):

[e]scalation factors for labor and energy [. . .] are to be taken from regional data of U.S. Department of Labor Bureau of Labor Statistics. . .

RAI #2: Citation for real rate of returns:

Provide the citation (e.g., an Order by the rate-regulatory authority) by the regulatory entity 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 within the DFS Report.

Enclosure

In the submission on March 29, 2011, AEC reported the following:

5 percent rate of escalation in decommissioning costs,
6.5 percent rates of earnings on decommissioning funds

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. . .

RAI #3: After-tax decommissioning funds as of December 31, 2010:

Indicate if the amount of decommissioning funds identified within the DFS Report for SSES 1 and 2 are the after-tax amounts of decommissioning funds accumulated through December 31, 2010. If not, provide the after-tax amounts of decommissioning funds accumulated through December 31, 2010.

In the submission on March 29, 2011, AEC reported the amounts of decommissioning funds accumulated as of December 31, 2010, for SSES 1 and 2, but did not indicate if the amounts stated were the before or after-tax balances.

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.