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 50-388 Susquehanna Steam Electric Station, Unit 2, Pennsylv 05000388  
 AUTH. NAME AUTHOR AFFILIATION  
 FIELDS, J. S. Pennsylvania Power & Light Co.  
 RECIP. NAME RECIPIENT AFFILIATION  
 TOMAYKO, W. Pennsylvania, Commonwealth of

SUBJECT: Submits surety bond to Pennsylvania Department of Environmental Resources for Construction & Demolition Site # 3 in Salem Township, Luzerne County. R I

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**Pennsylvania Power & Light Company**

Two North Ninth Street • Allentown, PA 18101-1179 • 215/774-5151

August 11, 1992

Mr. William Tomayko  
Regional Facilities Manager  
Solid Waste Management  
Pennsylvania Department of Environmental Resources  
90 East Union Street - 2nd Floor  
Wilkes-Barre, PA 18701-3296

SUSQUEHANNA STEAM ELECTRIC STATION  
SURETY BOND FOR CONSTRUCTION AND  
DEMOLITION SITE #3, I.D. 101363  
CCN 741326 FILE R9-8C  
PLE-15890

Dear Mr. Tomayko:

The Pennsylvania Power & Light Company (PP&L) is submitting a surety bond to the Pennsylvania Department of Environmental Resources (PaDER) for Construction and Demolition Site #3 located in Salem Township, Luzerne County. Surety bond no. 5693511 dated July 30, 1992 replaces bond no. 5444322. This site is located at the Susquehanna SES. Operations at Site #3 were discontinued prior to July 4, 1992.

An original and two copies of this bond are being provided by PP&L to the PaDER.

If you have any questions or comments please call me at (215) 774-7889.

Sincerely,

Jerome S. Fields  
Sr. Env. Scientist-Nuclear

Attachments

jsf/1th307a(25)

cc: NRC Document Control Desk  
NRC Region I  
Mr. G. F. Maxwell, Acting NRC Project Manager

*Add: NRR/DET/ESGB  
A001  
11*

9208180222 920811  
PDR ADDCK 05000387  
P PDR

ENCLOSURE

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL RESOURCES  
BUREAU OF WASTE MANAGEMENT

Date Prepared  
July 30, 1992

I.D. Number  
101363

**SURETY BOND**  
**For A Waste Management Facility**

To be completed by Permittee/Operator:  
Pennsylvania Power & Light Company Solid Waste  
Name of Facility: Disposal Site #3

Address: Susquehanna SES, P.O. Box 467  
(U.S. Route 11)  
Berwick, PA 18603

Municipality: Salem Township

County: Luzerne

Department Use Only:

Solid Waste Permit No.: \_\_\_\_\_

Date of Permit Issuance: \_\_\_\_\_

Permit Acreage: \_\_\_\_\_

Type of Facility: Check one:

- Hazardous
- Municipal
- Residual
- Other (describe) Demolition, Waste Disposal  
(Describe facility type/activity)

Purpose: Check one:

(1) Operation and Closure of a Waste Management Facility

- (a) Initial Bond
- (b) Repermit of Existing Facility
- (c) Additional Bond
- (d) Replacement Bond
- (e) Change of Ownership
- (f) Application for Mobile Processing facility permit

(2) Closure of a Waste Management Facility

To be completed by Surety Company:  
  
Bond No.: 5693511



WHEREAS, PENNSYLVANIA POWER & LIGHT COMPANY (1) a Corporation,  
(Name of Permittee, or Operator)

incorporated under the Laws in the State of Pennsylvania

or (2) \_\_\_\_\_, with its principal place of  
(Individual, Limited/General Partnership, Registered Fictitious Name Business)

business at Two North Ninth Street, Allentown, PA 18101  
(Address)

or (3) \_\_\_\_\_ has (1) filed application for permit(s); or (2) executed  
(municipality or municipal authority)

a \_\_\_\_\_ (hereinafter "agreement") dated \_\_\_\_\_  
(Consent agreement/consent decree/consent adjudication) (date of agreement)

with the Commonwealth of Pennsylvania, Department of Environmental Resources (hereinafter referred to as the  
"Department"), or (3) has been ordered by the Department, under the provisions of the "Pennsylvania Solid Waste  
Management Act", Act of July 7, 1980, No. 97, as amended (hereinafter "Act 97") for the purpose, as indicated above

of either (1) the operation and closure or (2) closure of a waste management facility which will affect 4.65  
(Acreage to be Under Permit or as Referenced by Order/Agreement, etc)

acres of land owned by PENNSYLVANIA POWER & LIGHT COMPANY in  
(Name of Landowner)

Salem Township

(Name of Municipality)

Luzerne County, Pennsylvania (hereinafter referred to as "facility").

(Name of County)

NOW THEREFORE, KNOW ALL MEN BY THESE PRESENTS that we, PENNSYLVANIA POWER & LIGHT COMPANY  
(Name of Principal)

\_\_\_\_\_, as principal, and

SAFECO INSURANCE COMPANY OF AMERICA, a corporation of the State of

Washington, licensed to do business in the Commonwealth of Pennsylvania, and

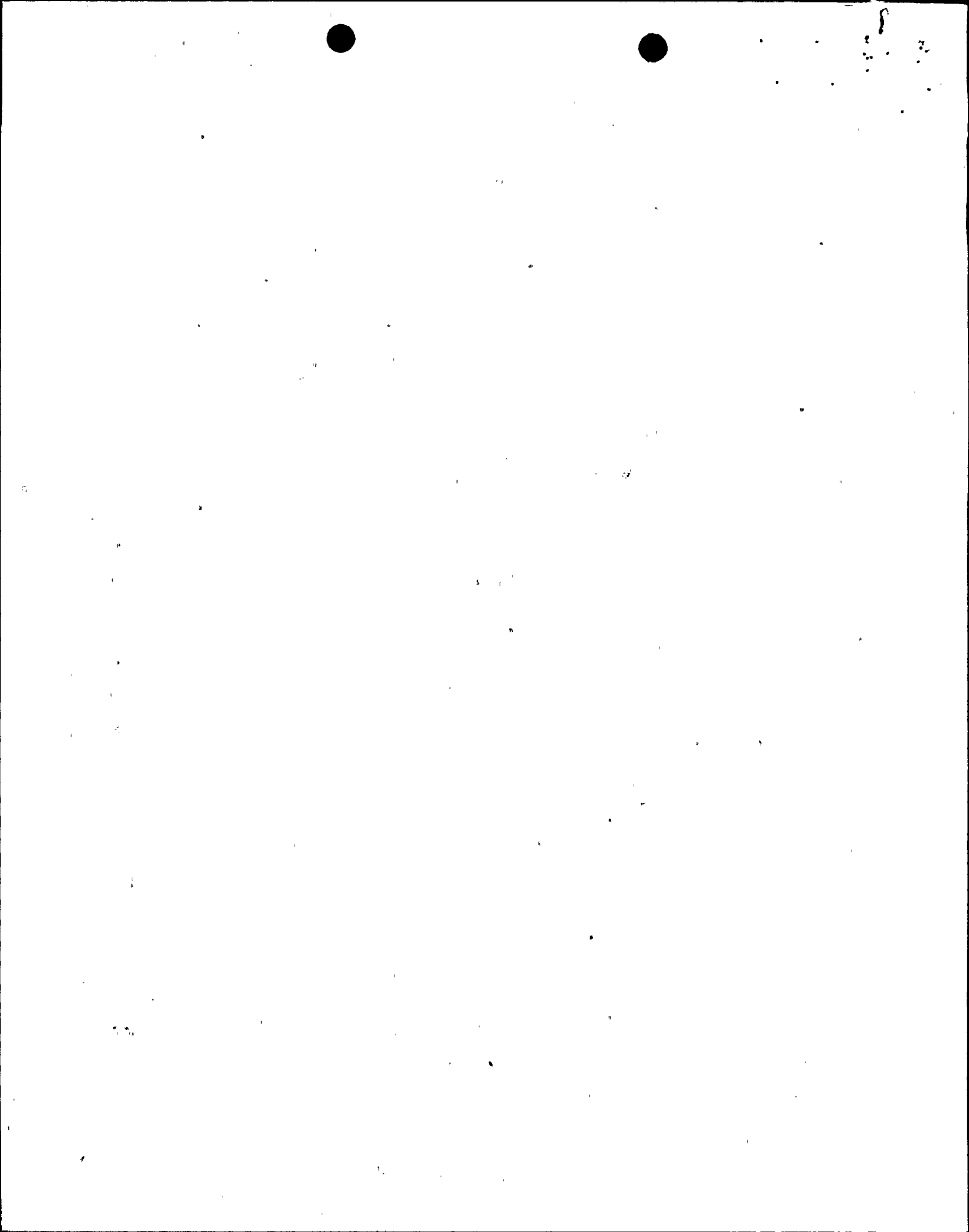
with its principal place of business at Three Bala Plaza East, Bala Cynwyd, PA 19004  
(Address)

\_\_\_\_\_, as surety,

and intending to be legally bound hereby, are held and firmly bound unto the Department, in the just and full sum of

TWENTY-SEVEN THOUSAND ONE HUNDRED AND NO/100----- (\$27,100.00-----) Dollars,  
(Written Dollar Amount) (Numerical Dollar Amount)

so the payment whereof, well and truly to be made, we do hereby bind ourselves, our heirs, executors, admini-  
strators, assigns and successors, firmly by these presents:





NOW THE CONDITION OF THIS OBLIGATION is such that if the operator shall faithfully perform all of the requirements of (1) the Act of Assembly approved July 7, 1980, P.L. 380, known as the "Solid Waste Management Act"; (2) the Act of Assembly approved June 22, 1937, P.L. 1987, as amended, known as "The Clean Streams Law"; (3) the Act of Assembly approved January 8, 1960, P.L. 2119, as amended, known as the "Air Pollution Control Act"; (4) the applicable provisions of the Act of Assembly approved November 26, 1978, P.L. 1375, as amended known as the "Dam Safety and Encroachments Act"; (5) the applicable provisions of the Act of Assembly approved May 31, 1945, P.L. 1198, as amended, known as the "Surface Mining Conservation and Reclamation Act"; (6) the Act of Assembly approved July 28, 1988, P.L. 556, known as the "Municipal Waste Planning, Recycling and Waste Reduction Act"; (7) the rules and regulations promulgated thereunder; (8) the provisions and conditions of the permits issued thereunder and designated in this bond; (9) any agreement with or order of the Department, and (10) such amendments or additions to the acts, regulations, terms and conditions of the permits, and orders of the Department as may hereinafter be lawfully made (all of which are hereinafter referred to as the "law"), then this obligation shall be null and void, otherwise to be and remain in full force and effect.

LIABILITY UPON THIS BOND shall be for the amount specified herein. Liability upon this bond shall be continuous from the initiation of operations at the facility, and shall continue for the duration of the processing and/or disposal of solid waste at the aforesaid facility and for a period of ten (10) years after approved final closure of the site, unless released in whole or in part by the Department, in writing, prior thereto as provided by the law. In the event any environmental damage is caused by the Principal in violation of the aforementioned law, then the bond shall not be released, but the liability under this bond shall continue until such environmental damage is corrected and the site restored to a condition of compliance with the aforementioned law. This bond shall be in default if the Principal fails, refuses or is unable to complete restoration work as directed, in writing, by the Department. Liability upon this bond shall extend to the entire facility. It is agreed and understood by the Surety and the Principal that this bond covers and includes any and all liabilities and obligations under the aforementioned law which accrued on the permit site prior to the issuance of Permit No. 101363, as well as any and all liabilities and obligations of the Principal to be accrued under the law from the date of issuance of the Permit until such time as the Department shall release, in writing, such liabilities and obligations.

It is acknowledged and agreed by the parties that the liability upon this bond is a penal sum, and as such the Commonwealth retains an interest in such guarantee, which interest may not be affected by bankruptcy, insolvency,

or other financial incapacity of the Principal on the bond until release of such liability as provided by the law.

UPON THE HAPPENING OF ANY DEFAULT of the provisions, conditions and obligations assumed under bond and the declaration of a forfeiture by the Secretary, or his designee, the period for appeal provided by having expired, the Principal and the Surety hereby authorize and empower the Attorney General of Commonwealth of Pennsylvania, or any other attorney of any court of record in Pennsylvania, or elsewhere, by deputized for the purpose, to appear for and confess judgement against the principal and/or the surety, th successors or assigns, in favor of the Commonwealth of any sum or sums of money which may be due hereunder, w or without defalcation or declaration filed, with interest and costs, with release of errors, without stay of execut and with ten (10%) percent added for collection fees, and for the exercise of this power, this instrument, or a cc thereof, any rule of court to the contrary notwithstanding, shall be full warrant and authority. This power shall inexhaustible. The surety and principal are jointly and severally liable for payment of the bond amount, which st be confessed to judgement and execution upon forfeiture.

The principal and surety further agree that execution may issue upon judgement so confessed for the amount of money and accrued interest that is owing from the principal and/or the surety to the Commonweal with costs and collection fee upon filing information in writing in the court when such judgement shall be entered.

Full payment shall be made under the bond within 30 days of receipt of the Department's declaration forfeiture by the surety.

The surety may cancel the bond by sending written notice of cancellation to the Department and the princi on the bond, only under the following conditions:

The notice of cancellation shall be sent by certified mail, return receipt requested. Cancellation may not t effect until 120 days after receipt of the notice of cancellation by the Department and the principal on the bond evidenced by return receipts.

Within 30 days after receipt of a notice of cancellation, the Principal shall provide the Department with replacement bond as defined by the law. If the Principal fails to submit a replacement bond acceptable to Department within the 30 day period, the Department will issue a notice of violation to the Principal requiring th the bond be replaced within 30 days of the notice of violation. If the bond is not replaced within the 30 day peri

the Department may issue a cessation order for permits of the Principal and related parties, and thereafter take such action as may be appropriate.

Failure of the Principal to submit a replacement bond within 30 days after the notice of violation constitutes grounds for forfeiture of the bond, and other bonds submitted by the Principal, under the law. If the Department declares the bond forfeited before the expiration of the 120 day period, the notice of cancellation is null and void.

FURTHER, the principal and the surety agree that their liability hereunder shall not be impaired or affected by (a) any renewal or extension of the time for performance of any of the provisions, conditions or obligations upon which this bond is conditioned, or (b) any forbearance or delay in declaring this bond to be forfeited or in enforcing payment on this bond. The surety hereby waives any right to cover or perform the obligations of the principal upon the principal's default, provided however, that the Department may, in writing, authorize the surety to cover such defaulted obligations if the Department determines that it is in the Department's interest to do so.

FURTHER, the Surety agrees that any collateral held by it as security for its indemnification with respect to this bond is held by the Surety as a trust on behalf of the Department to assure the liabilities and obligations secured by this bond will be performed, fulfilled and complied with. The Surety hereby agrees that, upon its cessation of business, insolvency or bankruptcy, all of its right, title and interest in such collateral shall immediately vest in the Department such that the Department has full ownership thereof.

FURTHER, the Principal and the Surety agree that their liability hereunder shall not be impaired or affected by (a) any renewal or extension of the time for performance of any of the provisions, conditions or obligations upon which this bond is conditioned, or (b) any forbearance or delay in declaring this bond to be forfeited or in enforcing payment on this bond.

FURTHER, the Department reserves the right to require additional bonding from the Principal, as provided by law, which shall be a supplement to and augment the bond liability provided herein. The Department may release, in writing, a portion of the amount of liability provided in this bond for partial completion of the provisions, conditions and obligations assumed by the Principal herein, as may be authorized by the law, and such amount released shall be a credit upon the total amount of this bond. Nothing herein shall limit or preclude the Department from seeking to enforce any remedy, in addition to the forfeiture of this bond, which may be authorized or provided by law.

IN WITNESS WHEREOF, the principal and surety have hereunto set their hands and seals, intending to be egally bound hereby, this 30th day of July, 1992.

Principal: PENNSYLVANIA POWER & LIGHT COMPANY

(Print Name of Permittee / Operator)

Affix Corporate Seal Here:

~~Attest or~~ Witness:

Donald Fiorito  
(Print / Type Name)  
*Donald Fiorito*  
(Signature of Above)

Diane S. Snyder  
(Print / Type Name)  
*Diane S. Snyder*  
(Signature of Above)

By: John B. Biggar, Vice President-Finance  
(Print / Type Name and Title)  
*John B. Biggar*  
(Signature of Above)

By: Helen J. Wolfer, Asst. Sec'ry & Asst. T  
(Print / Type Name and Title)  
*Helen J. Wolfer*  
(Signature of Above)

Surety: SAFECO INSURANCE COMPANY OF AMERICA

(Print Name)

Affix Corporate Seal Here:

~~XXXXXX~~ Witness:

Diane C. Bell  
(Print / Type Name)  
*Diane C. Bell*  
(Signature of Above)

\_\_\_\_\_  
(Print / Type Name)  
\_\_\_\_\_  
(Signature of Above)

Pennsylvania Resident Agent

By: Sally A. Mullen, Attorney-in-fact  
(Print / Type Name and Title)  
Pennsylvania Resident Licensed Agent  
*Sally A. Mullen*  
(Signature of Above)

By: \_\_\_\_\_  
(Print / Type Name and Title)  
\_\_\_\_\_  
(Signature of Above)  
\_\_\_\_\_  
(Signature)  
\_\_\_\_\_  
(Print / Type Name)

Approved as to legality and form:

Approved for the Department:

\_\_\_\_\_  
(Chief Counsel / Assistant Counsel)  
Department of Environmental Resources

\_\_\_\_\_  
(Type Name and Title)  
\_\_\_\_\_  
(Signature of Above)  
\_\_\_\_\_  
(Date)



2



No. 3218

KNOW ALL BY THESE PRESENTS:

That SAFECO INSURANCE COMPANY OF AMERICA and GENERAL INSURANCE COMPANY OF AMERICA, each a Washington corporation, does each hereby appoint

--KATHRYN G. SCHNEIDER; KATHLEEN M. ZIOBRO; DAVID CHARLES ROSENBERG; JOHN R. MANNERING; HARRY C. ROSENBERG; SALLY A. MULLEN; DIANE M. DIMARTINO, Bala Cynwyd, Pennsylvania--

its true and lawful attorney(s)-in-fact, with full authority to execute on its behalf fidelity and surety bonds or undertakings and other documents of a similar character issued in the course of its business, and to bind the respective company thereby.

IN WITNESS WHEREOF, SAFECO INSURANCE COMPANY OF AMERICA and GENERAL INSURANCE COMPANY OF AMERICA have each executed and attested these presents

this 29th day of July, 1991

CERTIFICATE

Extract from the By-Laws of SAFECO INSURANCE COMPANY OF AMERICA and of GENERAL INSURANCE COMPANY OF AMERICA:

"Article V, Section 13. — FIDELITY AND SURETY BONDS . . . the President, any Vice President, the Secretary, and any Assistant Vice President appointed for that purpose by the officer in charge of surety operations, shall each have authority to appoint individuals as attorneys-in-fact or under other appropriate titles with authority to execute on behalf of the company fidelity and surety bonds and other documents of similar character issued by the company in the course of its business . . . On any instrument making or evidencing such appointment, the signatures may be affixed by facsimile. On any instrument conferring such authority or on any bond or undertaking of the company, the seal, or a facsimile thereof, may be impressed or affixed or in any other manner reproduced; provided, however, that the seal shall not be necessary to the validity of any such instrument or undertaking."

Extract from a Resolution of the Board of Directors of SAFECO INSURANCE COMPANY OF AMERICA and of GENERAL INSURANCE COMPANY OF AMERICA adopted July 28, 1970.

"On any certificate executed by the Secretary or an assistant secretary of the Company setting out,

- (i) The provisions of Article V, Section 13 of the By-Laws, and
- (ii) A copy of the power-of-attorney appointment, executed pursuant thereto, and
- (iii) Certifying that said power-of-attorney appointment is in full force and effect,

the signature of the certifying officer may be by facsimile, and the seal of the Company may be a facsimile thereof."

I, Boh A. Dickey, Secretary of SAFECO INSURANCE COMPANY OF AMERICA and of GENERAL INSURANCE COMPANY OF AMERICA, do hereby certify that the foregoing extracts of the By-Laws and of a Resolution of the Board of Directors of these corporations, and of a Power of Attorney issued pursuant thereto, are true and correct, and that both the By-Laws, the Resolution and the Power of Attorney are still in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the facsimile seal of said corporation

this 30th day of July, 1992



Small, faint, illegible markings or characters in the top right corner.



SAFECO INSURANCE COMPANY OF AMERICA  
 FINANCIAL STATEMENT — DECEMBER 31, 1991

Assets		Liabilities	
Cash and Bank Deposits .....	\$ 23,162,325	Unearned Premiums .....	\$ 328,921,950
*Bonds — U.S. Government .....	101,112,511	Reserve for Claims and Claims Expense .....	1,034,490,448
*Other Bonds .....	1,277,363,786	Funds Held Under Reinsurance Treaties .....	725,150
*Stocks .....	404,129,813	Reserve for Dividends to Policyholders .....	8,007,561
Real Estate .....	39,787,131	Additional Statutory Reserve .....	1,039,192
Agents' Balances or Uncollected Premiums .....	130,857,735	Reserve for Commissions, Taxes and Other Liabilities .....	<u>163,031,504</u>
Accrued Interest and Rents .....	40,026,032	Total .....	<u>\$1,536,215,805</u>
Other Admitted Assets .....	<u>105,831,470</u>	Capital Stock .....	\$ 2,500,000
		Paid in Surplus .....	13,639,941
		Unassigned Surplus .....	<u>569,915,057</u>
		Surplus to Policyholders .....	<u>586,054,998</u>
Total Admitted Assets .....	<u>\$2,122,270,803</u>	Total Liabilities and Surplus .....	<u>\$2,122,270,803</u>



\* Bonds are stated at amortized or investment value; Stocks at Association Market Values. Securities carried at \$236,042,014 and real estate carried at \$4,282,725 are deposited as required by law.

I, PHILIP A. STEPHENS, Senior vice-president of SAFECO Insurance Company of America, do hereby certify that the foregoing is a true, and correct statement of the Assets and Liabilities of said Corporation, as of December 31, 1991, to the best of my knowledge and belief.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of said Corporation at Seattle, Washington, this 1st day of March, 1992.

*Philip A. Stephens*

Senior Vice-President





Certificate Number: **Nº 008260**

**ASSOCIATED ELECTRIC & GAS INSURANCE SERVICES LIMITED**  
Hamilton, Bermuda

**CERTIFICATE OF INSURANCE**  
(Excess Liability)

This Certificate is furnished to the Certificate Holder named below as a matter of information only. Neither this Certificate nor the issuance hereof modifies the policy of insurance identified below (the "Policy") in any manner. The Policy terms are solely as stated in the Policy or in any endorsement thereto. Any amendment, change or extension of the Policy can only be effected by a specific endorsement issued by the Company and attached to the Policy.

The undersigned hereby certifies that the Policy has been issued by Associated Electric & Gas Insurance Services Limited (the "Company") to the Named Insured identified below for the coverage described and for the policy period specified.

Notwithstanding any requirements, terms or conditions of any contract or other document with respect to which this Certificate may be issued or to which it may pertain, the insurance afforded by the Policy is subject to all of the terms of the Policy.

**NAME OF INSURED:** Pennsylvania Power & Light Company

**PRINCIPAL ADDRESS:** Two North Ninth Street, Allentown, PA 18101

**POLICY NUMBER:** XO 117 AIA 91

**POLICY From:** 12/31/91  
**PERIOD: To:** 12/31/92

**RETROACTIVE DATE:** 12/31/86

**DESCRIPTION OF COVERAGE:** Claims-First-Made Excess Liability Policy covering claims for Bodily Injury, Property Damage and Personal Injury arising from the operations described below.

**LIMIT OF LIABILITY:** \$ 25,000,000 per occurrence and in the aggregate, where applicable.

**ADDITIONAL INSURED:** The Certificate Holder is an additional Insured under the Policy but only (i) to such extent and for such Limits of Liability (subject always to the terms and Limits of Liability of the Policy) as the Named Insured has agreed to provide insurance for the Certificate Holder under the following contract:

Demolition Waste Disposal Facility Permit #101363,

and (ii) with respect to the following operations:  
Susquehanna SES, Solid Waste Disposal Site #3.

The insurance coverage provided is for the purpose of satisfying the requirements of Pa. Law, including 25 Pa. Code 271.271-271.376.

Should the Policy be cancelled, assigned or changed in a manner that is materially adverse to the Insured(s) under the Policy, the undersigned will endeavor to give 120 days advance written notice thereof to the Certificate Holder, but failure to give such notice will impose no obligation or liability of any kind upon the Company, the undersigned or any agent or representative of either.

**DATE:** December 12, 1991

**ISSUED TO:** Commonwealth of Pennsylvania

("Certificate Holder")

**ADDRESS:** Dept. of Environmental Resources  
Bureau of Waste Management  
90 East Union Street - 2nd Floor  
Wilkes-Barre, PA 18701

**AEGIS INSURANCE SERVICES, INC.**

BY: *Sandra D. Gleser*

At Jersey City, New Jersey

SUSQUEHANNA STEAM ELECTRIC STATION  
DEMOLITION WASTE SITE #3

LANDFILLS  
BONDING WORKSHEET A  
DISPOSING OF INVENTORY \*

Reference  
Source

- |    |   |            |  |
|----|---|------------|--|
| 1. | Maximum volume of waste to be placed in disposal area as part of closure.                 | <u>N/A</u> |  |
| 2. | Estimated volume of contaminated residues and soils to be disposed of as part of closure. | <u>N/A</u> |  |
| 3. | Total volume of waste and residues to be disposed of (Line 1 + 2).                        | <u>N/A</u> |  |
| 4. | Unit Cost of disposing of waste and residues.   | <u>N/A</u> |  |
| 5. | Total cost to dispose of waste and residues (Line 3 x 4).                                 | <u>N/A</u> |  |

\*N/A There is no inventory of waste or contaminated residue that will require disposal for closure of this facility

**LANDFILLS  
BONDING WORKSHEET B  
DECONTAMINATING THE FACILITY \***

	Reference Source	
1. Total volume of contaminated soils and materials to be removed and disposed of off-site.	<u>N/A</u>	
2. Unit cost to dispose of contaminated materials (includes transportation).	<u>N/A</u>	
3. Cost to dispose of soil and contaminated materials (Line 1 x 2).	<u>N/A</u>	
4. Landfill equipment to be decontaminated based on surface area.	<u>N/A</u>	
5. Unit cost to decontaminate.	<u>N/A</u>	
6. Cost to decontaminate (Line 4 x 5).	<u>N/A</u>	
7. Volume of liquid generated during decontamination (base on gallons per foot <sup>2</sup> required for decontamination, e.g. gals/ft <sup>2</sup> x ft <sup>2</sup> = Total Gallons).	<u>N/A</u>	
* N/A None of the material disposed of at this facility will require decontamination		

8. Unit cost to dispose of liquid (includes transportation) N/A \_\_\_\_\_

9. Cost to dispose (Line 7 x 8) N/A

10. Total cost to decontaminate (Line 3 + 6 + 9) N/A

\* N/A None of the material disposed of at this facility will require decontamination

**LANDFILLS  
BONDING WORKSHEET C  
CAP AND FINAL COVER PLACEMENT**

		Reference Source
1. Maximum area to be capped and covered (includes only areas that will be open at any one time).	<u>1.5</u>	
2. Unit cost of placing one foot of stable intermediate cover material for base of cap.	<u>N/A*</u>	
3. Total cost of base for cap (Line 1 x 2)	<u>N/A</u>	
4. Unit cost of _____ materials to be used as cap. (includes transportation and installation cost)	<u>N/A</u>	
5. Cost to cap (Line 1 x 4).	<u>N/A</u>	
6. Unit cost of drainage layer (if applicable) (installed cost).	<u>N/A</u>	
7. Cost to place drainage layer (Line 1 x 6).	<u>N/A</u>	
8. Unit cost to install 2' final cover (installed cost) (Cost of moving soil from local borrow area and grading)	<u>\$3.00 cu. yd. EST.</u>	

9. Cost to install 2' final cover (Line 1 x 8). \$14,520.00

10. Total cost of cap and final cover (Lines 3 + 5 + 7 + 9). \$14,520.00

Calculation of Cost to Install Cover Soil:

1.5 Acres X 43560 ft<sup>2</sup>/Acre X 2 ft. cover soil = 130,680

130,680 cu ft X  $\frac{1 \text{ cu yd}}{27 \text{ cu ft}}$  = 4,840 yds Final cover

4,840 cu yds X \$3.00/cu yd = \$14,520.00

**LANDFILLS  
BONDING WORKSHEET D  
REVEGETATION OF FINAL COVER,  
DISTURBED AREAS AND DRAINAGE WAYS**

		Refer Sour
1. Total area to be revegetated (acres).	<u>1.5</u>	
2. Type of vegetation <u>Course Lawn Mix</u> price per lb (including labor). 33% Kentucky Blue 33% Perennial Rye 33% Creeping Red Fescu	<u>\$3.20</u>	ES
	$\frac{\$80}{50 \text{ lbs}} \times 2.0 \text{ (for labor)}$	
3. Seeding rate per acre.	<u>100</u>	ES
4. Cost of seed (Line 1 x 2 x 3).	<u>\$480.00</u>	
5. Recommended fertilizer requirements.	<u>10-10-10</u>	
6. Quantity of fertilizer per acre.	<u>0.6 ton/Ac</u>	EST
7. Unit cost of fertilizer (includes labor). $\frac{\$180}{\text{Ton}} \times 2.0 \text{ (Labor)}$	<u>\$360.00</u>	EST
8. Cost of fertilizer (Line 1 x 6 x 7).	<u>\$324.00</u>	
9. Type of mulch <u>Straw</u> unit price (includes labor). $\frac{\$4.50}{\text{Bale}} \times 2.0 \text{ (for labor)}$	<u>\$9.00/bale</u>	



Reference  
Source

10. Mulching rate.	<u>200 Bales/Ac</u> <u>EST.</u>
11. Cost of mulch (Line 1 x 9 x 10).	<u>\$2,700.00</u>
12. Total Cost of vegetation (Line 4 + 8 + 11).	<u>\$3,504.00</u>

**LANDFILLS  
BONDING WORKSHEET E  
GROUNDWATER MONITORING \***

Reference  
Source

- |     |  |            |  |
|-----|--|------------|--|
| 1.  | Number of wells monitored.                       | <u>N/A</u> |  |
| 2.  | Samples per well.                                | <u>N/A</u> |  |
| 3.  | Total number of samples (Line 1 x 2).            | <u>N/A</u> |  |
| 4.  | Number of analyses per sample.                   | <u>N/A</u> |  |
| 5.  | Total number of analyses (Line 3 x 4).           | <u>N/A</u> |  |
| 6.  | Unit cost to collect sample (includes shipping). | <u>N/A</u> |  |
| 7.  | Cost to collect samples (Line 3 x 6).            | <u>N/A</u> |  |
| 8.  | Average cost of single analysis.                 | <u>N/A</u> |  |
| 9.  | Cost of analyses (Line 5 X 8).                   | <u>N/A</u> |  |
| 10. | Evaluation of data (manhours).                   | <u>N/A</u> |  |
| *   | Currently no ground water monitoring in place    |            |  |

Reference  
Source

- |   |            |                   |
|---|------------|-------------------|
| 11. Unit cost per manhour.                                  | <u>N/A</u> | <u>          </u> |
| 12. Cost of evaluation (Line 10 X 11).                      | <u>N/A</u> |                   |
| 13. Total number of samplings per year.                     | <u>N/A</u> |                   |
| 14. Cost of sampling per year [(Line 7 + 9 + 12) X 13)].    | <u>N/A</u> |                   |
| 15. Years of sampling                                       | <u>N/A</u> |                   |
| 16. Total cost of groundwater monitoring<br>(Line 14 X 15). | <u>N/A</u> |                   |
| * Currently no ground water monitoring in place.            |            |                   |

**LANDFILLS  
BONDING WORKSHEET F  
MAINTENANCE COSTS**

		Reference Source
1. Repair of cap and final cover.	<u>\$2,178.00</u>	<u>15% of Ini</u>
2. Repair of surface water run-on and runoff structures	_____	_____
3. Repair of fence.	_____	_____
4. Repair of leachate conveyance and collection structures (not including surface impoundment or tanks).	_____	_____
5. Well maintenance and repair.	_____	_____
6. Other costs.	<u>\$525.60</u>	<u>15% of In:</u>
7. Total maintenance costs (Line 1 + 2 + 3 + 4 + 5 + 6).	<u>\$2,703.60</u>	

LANDFILLS  
BONDING WORKSHEET G \*

Gas Monitoring

Reference  
Source

1.	<b>Monitoring</b>		
	a. Number of gas monitoring wells	_____	
	b. Time required to monitor well (hrs/well)	_____	
	c. Contract lab technician unit labor cost (\$/hr)	_____	_____
	d. Number of times gas monitoring is done during closure	_____	
	e. Gas monitoring cost Line 1a x Line 1b x Line 1c x Line 1d		_____
2.	<b>Administrative (Reporting)</b>		
	a. Contract lab technician time required (hrs/well)	_____	
	b. Technician unit labor cost (\$/hr)	_____	_____
	c. Technician cost Line 1a x line 1d x Line 2a x Line 2b	_____	
	d. Clerical time required (hrs/well)	_____	
	e. Clerical unit labor cost (\$/hr)	_____	_____
	f. Clerical cost Line 1a x Line 1d x Line 2d x Line 2e	_____	
	g. Administrative subtotal Line 2c + Line 2f		_____
3.	<b>Maintenance of Gas Collection System</b>		
	a. Maintenance time required (hrs)	_____	
	b. Unit labor cost (\$/hr)	_____	_____
	c. Maintenance cost Line 3a x Line 3b	_____	
4.	<b>Gas Monitoring total</b> Line 1e + Line 2g + Line 3c		_____

\* No gas monitoring requirements



4  
2  
3

**LANDFILLS  
BONDING WORKSHEET F  
SUMMARY OF COSTS**

1.	Total from Line 5, Worksheet A	<u>---</u>
2.	Total from Line 10, Worksheet B	<u>---</u>
3.	Total from Line 10, Worksheet C	<u>\$14,520.00</u>
4.	Total from Line 12, Worksheet D	<u>\$3,504.00</u>
5.	Total from Line 16, Worksheet E	<u>---</u>
6.	Total from Line 7, Worksheet F	<u>\$2,703.60</u>
7.	Total from Line 4, Worksheet G	<u>---</u>
8.	Total Cost for Bonding (Line 1 + 2 + 3 + 4 + 5 + 6 + 7)..	<u>\$20,727.60</u>





### Summary of Bonding Costs

1.	Total cost for landfills	<u>\$20,727.60</u>
2.	Total cost for leachate management	<u>---</u>
3.	Total cost for impoundments for storage and pretreatment	<u>---</u>
4.	Total cost for surface impoundment for disposal	<u>---</u>
5.	Total cost for incineration	<u>---</u>
6.	Total cost for transfer facilities	<u>---</u>
7.	Total cost for land reclamation of sewage sludge	<u>---</u>
8.	Total cost for land disposal of sewage sludge	<u>---</u>
9.	Total cost for agricultural utilization of sewage sludge	<u>---</u>
10.	Total cost for composting	<u>---</u>
11.	Total cost for facility (add lines 1 - 10)	<u>\$20,727.60</u>
12.	Total bond for facility (line 11 + .85) (Cost for administration, review, professional certification and cost overruns, 15% increase)	<u>\$24,385.41</u>
13.	Total bond for facility allowing for inflation (Line 12 ÷ .90)	<u>\$27,094.90</u>