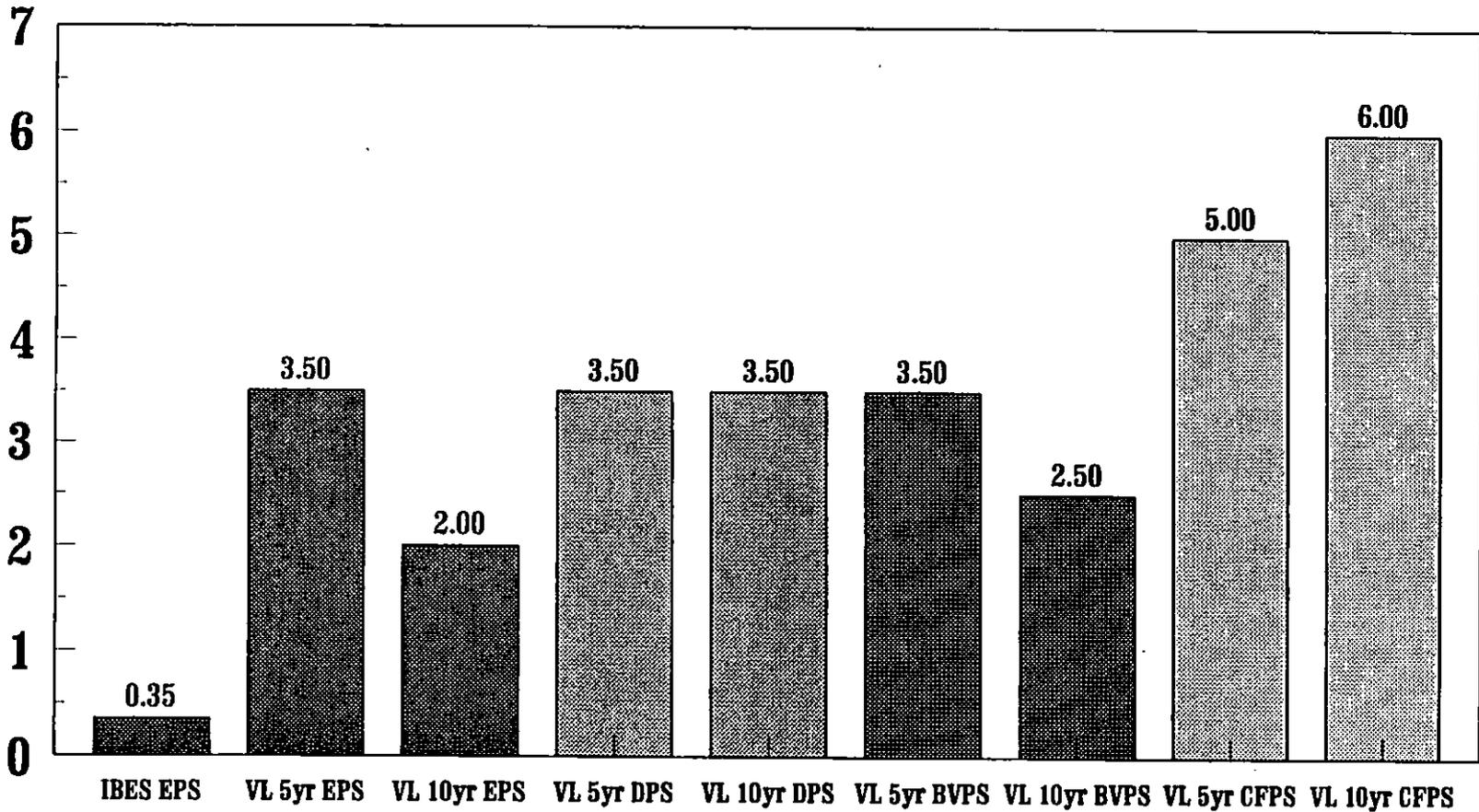


Pennsylvania Power & Light Co.

Historical Growth Rates

Percent (%)

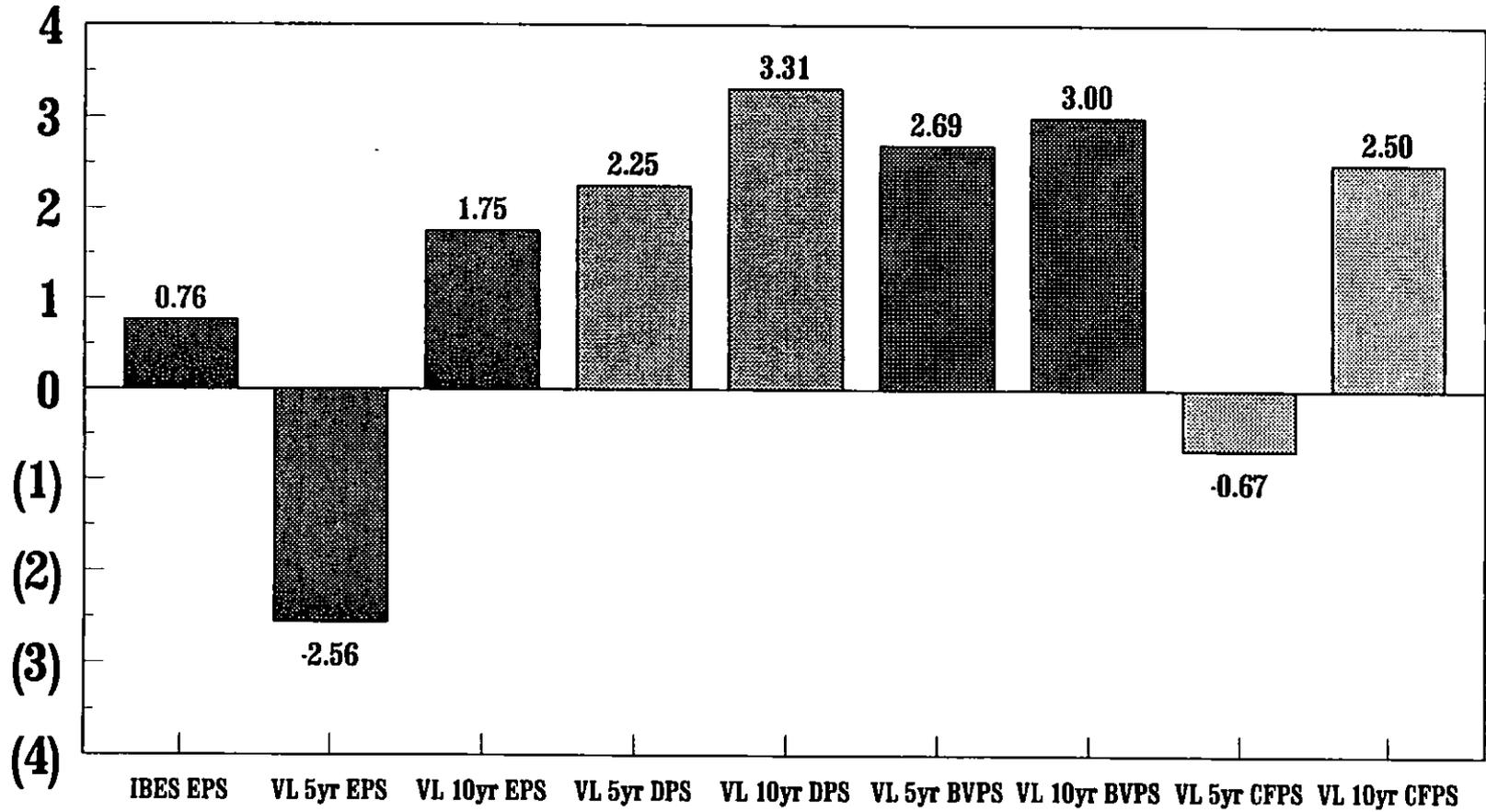


Growth Rates

EPS= Earnings Per Share, DPS= Dividends Per Share,
BVPS= Book Value Per Share, CFPS= Cash Flow Per Share

Barometer Group of Eight Electric Companies Historical Growth Rates

Percent (%)



Growth Rates

EPS= Earnings Per Share, DPS= Dividends per Share,
BVPS= Book Value Per Share, CFPS= Cash Flow Per Share

**Historic Internal Growth Rates
For the Years 1989-1993**

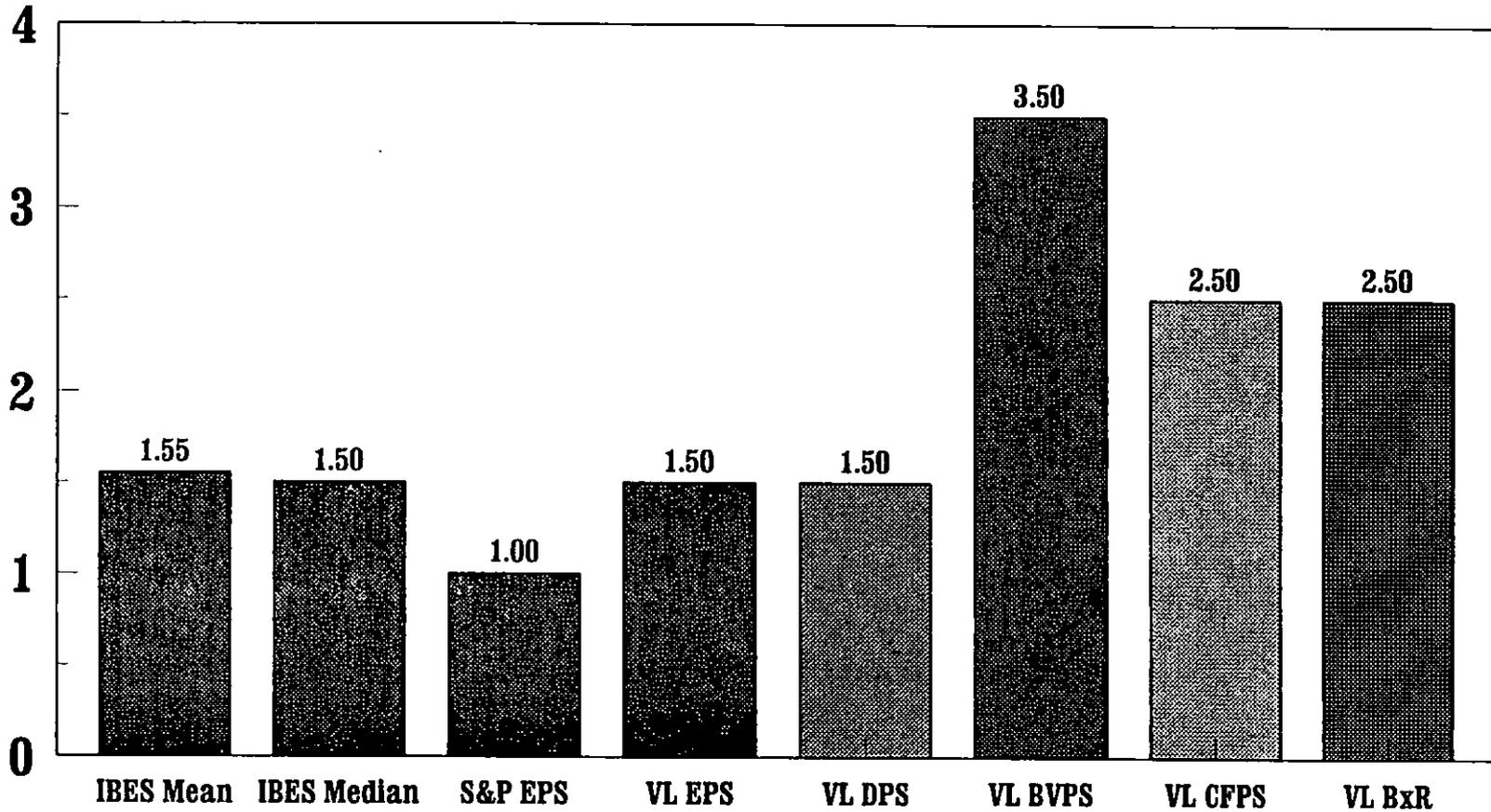
	1993	1992	1991	1990	1989	Five-Year Average	Five-Year Average Excluding Negatives
Pennsylvania Power & Light Co.							
Earnings Rate on Book Common Equity	13.1%	13.1%	13.4%	13.7%	14.6%		
Dividend Rate on Book Common Equity	10.5%	10.4%	10.4%	10.3%	10.3%		
Internal Growth Rate	2.7%	2.7%	3.1%	3.3%	4.3%	3.2%	3.2%
Barometer Group of Eight Electric Companies							
Allegheny Power System							
Earnings Rate on Book Common Equity	11.4%	11.6%	11.7%	11.9%	12.6%		
Dividend Rate on Book Common Equity	9.9%	10.2%	10.3%	10.4%	10.5%		
Internal Growth Rate	1.5%	1.4%	-1.4%	1.5%	2.1%	1.0%	1.6%
American Electric Power							
Earnings Rate on Book Common Equity	8.4%	11.1%	11.9%	11.6%	14.6%		
Dividend Rate on Book Common Equity	10.5%	10.5%	10.6%	10.5%	10.6%		
Internal Growth Rate	-2.1%	0.6%	1.3%	1.1%	4.0%	1.0%	1.8%
Atlantic Energy Inc							
Earnings Rate on Book Common Equity	11.7%	11.1%	12.1%	10.6%	13.6%		
Dividend Rate on Book Common Equity	10.0%	10.1%	10.5%	10.3%	10.5%		
Internal Growth Rate	1.7%	1.0%	1.6%	0.3%	3.1%	1.6%	1.6%
Baltimore Gas & Electric							
Earnings Rate on Book Common Equity	10.4%	9.5%	9.0%	6.6%	12.6%		
Dividend Rate on Book Common Equity	8.3%	8.4%	8.4%	8.5%	8.5%		
Internal Growth Rate	2.1%	1.1%	0.7%	-1.9%	4.0%	1.2%	2.0%
Delmarva Power & Light							
Earnings Rate on Book Common Equity	12.6%	12.4%	11.0%	4.5%	13.4%		
Dividend Rate on Book Common Equity	11.2%	11.4%	11.9%	11.6%	11.2%		
Internal Growth Rate	1.4%	1.0%	-1.0%	-7.1%	2.1%	-0.7%	1.5%
Dpl Inc							
Earnings Rate on Book Common Equity	13.7%	13.4%	11.1%	14.8%	14.7%		
Dividend Rate on Book Common Equity	10.8%	10.7%	10.4%	10.3%	10.1%		
Internal Growth Rate	2.9%	2.7%	0.7%	4.4%	4.7%	3.1%	3.1%
Potomac Electric Power							
Earnings Rate on Book Common Equity	11.9%	10.5%	12.6%	11.3%	15.5%		
Dividend Rate on Book Common Equity	10.0%	10.2%	10.6%	10.6%	10.5%		
Internal Growth Rate	1.9%	0.4%	2.0%	0.7%	5.0%	2.0%	2.0%
Public Service Entpr							
Earnings Rate on Book Common Equity	12.0%	10.8%	12.1%	12.5%	13.4%		
Dividend Rate on Book Common Equity	10.5%	10.8%	10.6%	10.2%	10.4%		
Internal Growth Rate	1.5%	0.0%	1.5%	2.3%	2.9%	1.6%	1.6%
Average							
Earnings Rate on Book Common Equity	11.5%	11.3%	11.4%	10.5%	13.8%		
Dividend Rate on Book Common Equity	10.2%	10.3%	10.4%	10.3%	10.3%		
Internal Growth Rate	1.4%	1.0%	1.0%	0.2%	3.5%	1.3%	1.9%

Source of Information : OneSource
Standard & Poor's Utility Compustat

Pennsylvania Power & Light Co.

Analysts' Five-Year Projected Growth Rates

Percent (%)

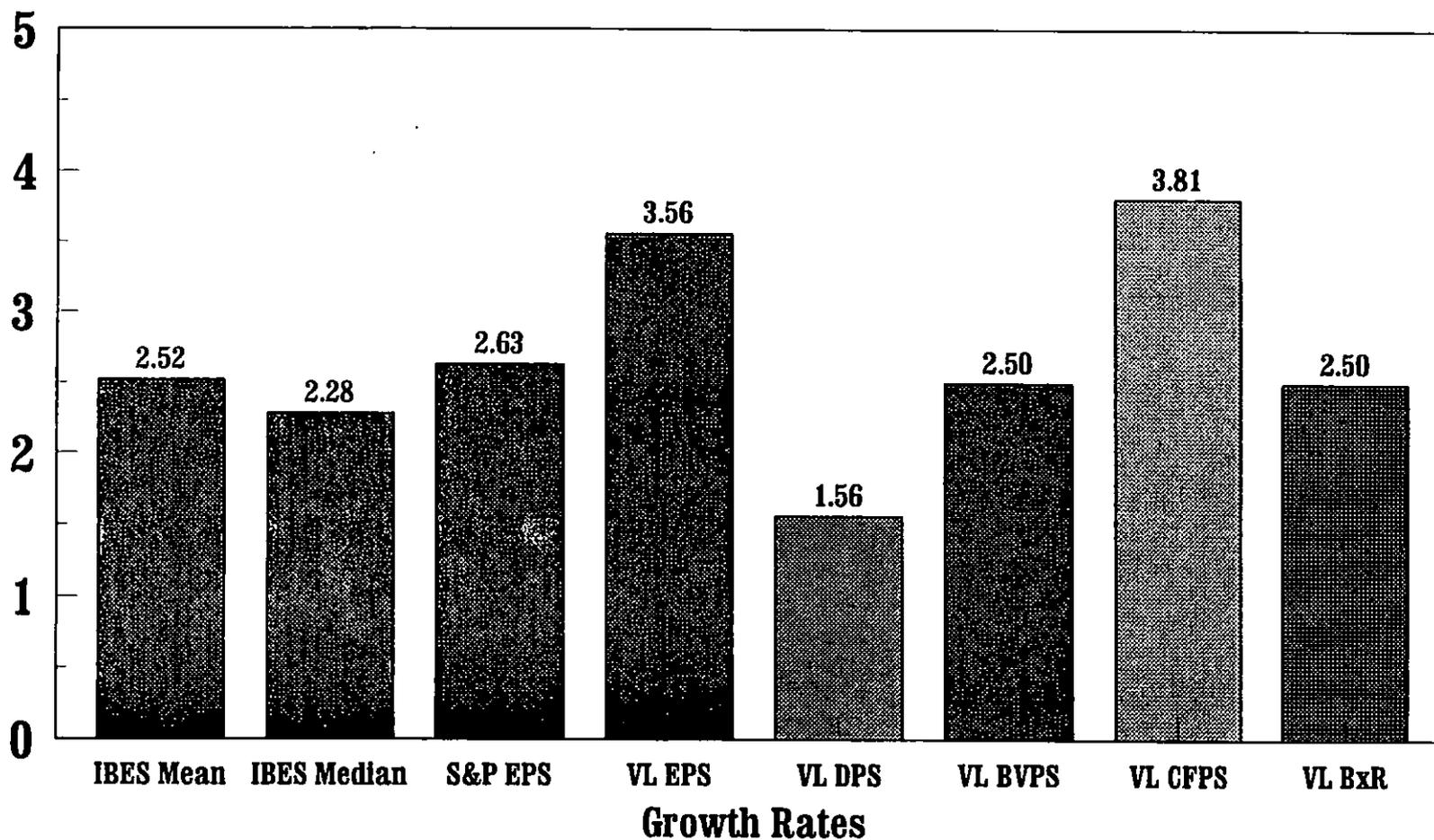


Growth Rates

EPS= Earnings Per Share, DPS= Dividends Per Share,
BVPS= Book Value Per Share, CFPS= Cash Flow Per Share

Barometer Group of Eight Electric Companies Analysts' Five-Year Projected Growth Rates

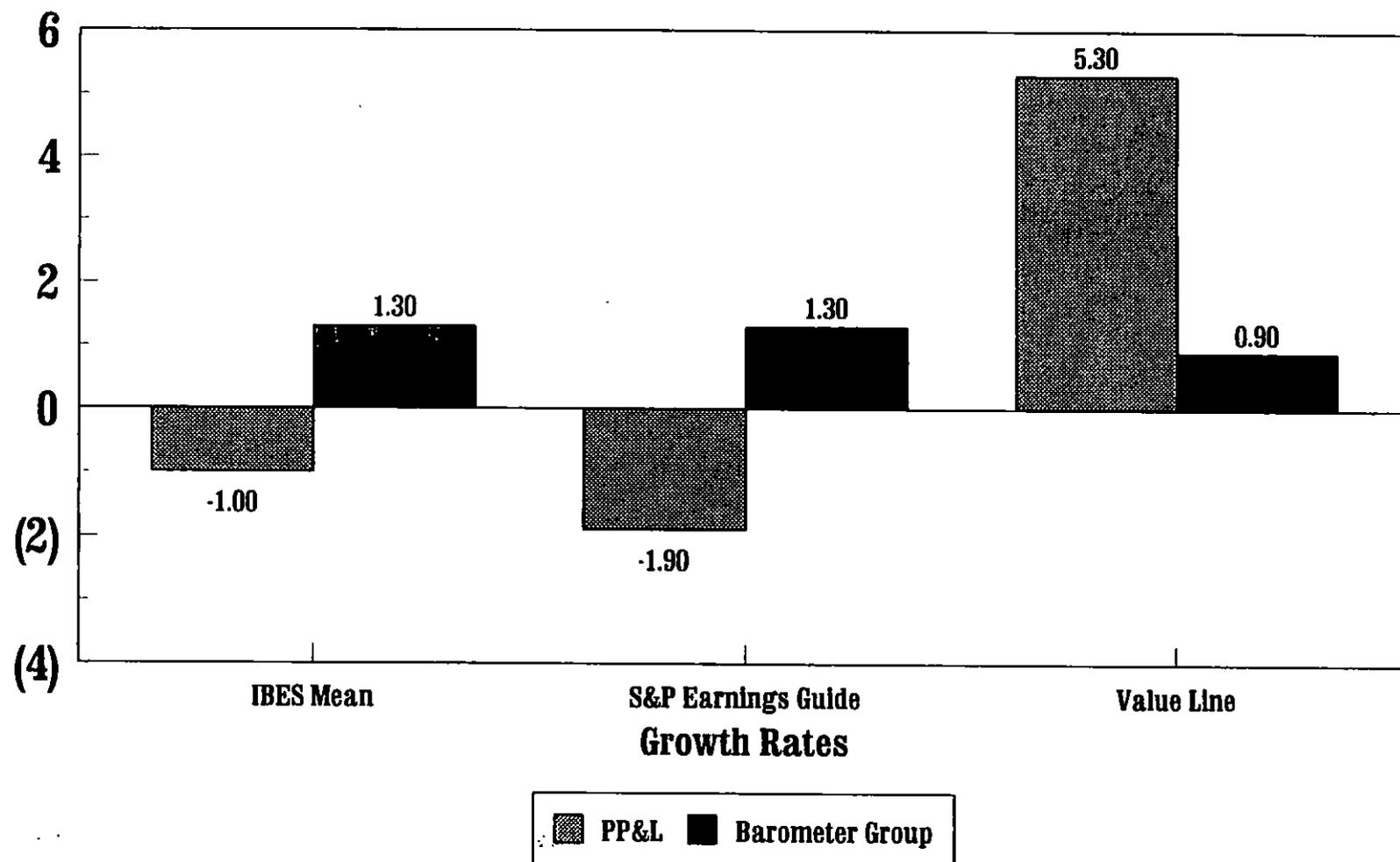
Percent (%)



EPS= Earnings Per Share, DPS= Dividends Per Share,
BVPS= Book Value Per Share, CFPS= Cash Flow Per Share

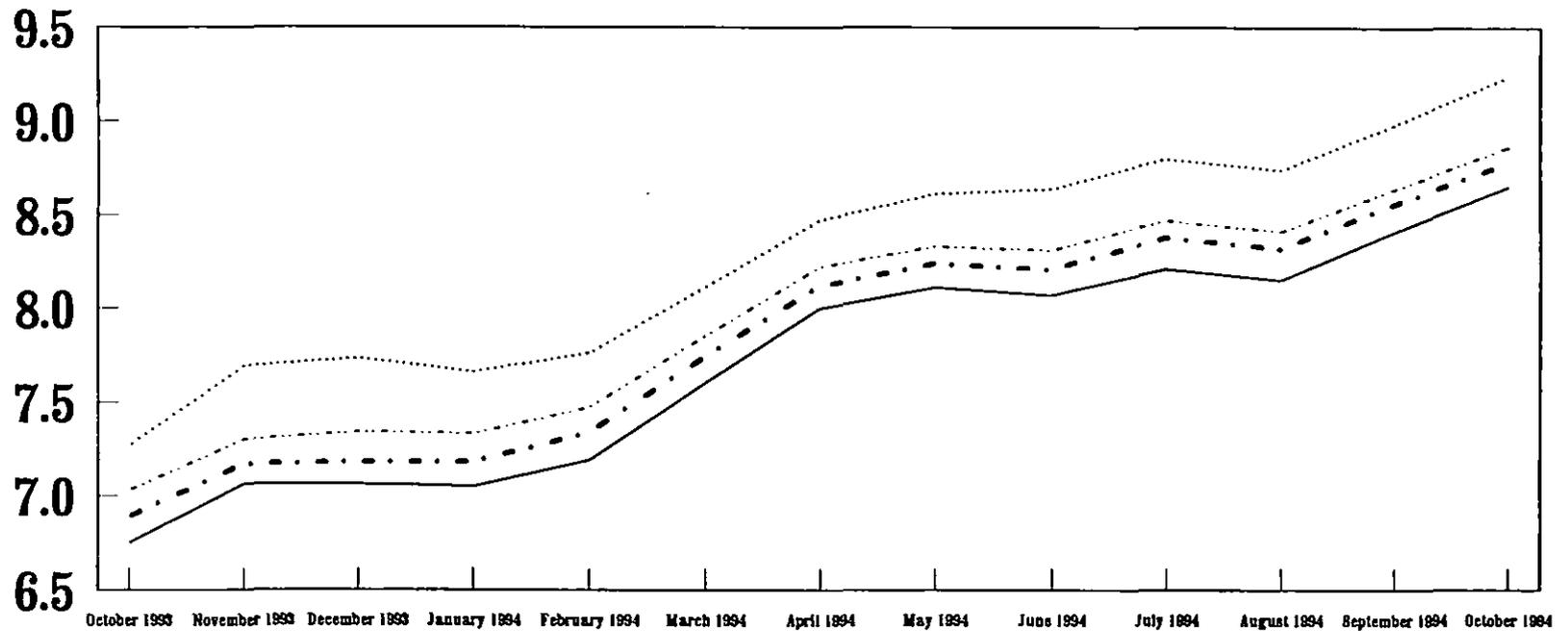
**Pennsylvania Power & Light Co.
and the Barometer Group of Eight Electric Companies**

**Analysts' Projected Short-Run Earnings Growth Rates (1995 over 1994)
Percent (%)**

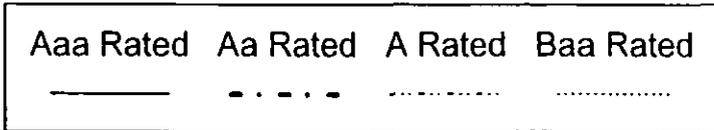


Pennsylvania Power & Light Co.
Interest Rate Trends
for Public Utility Bonds

Percent (%)



Bond Yields



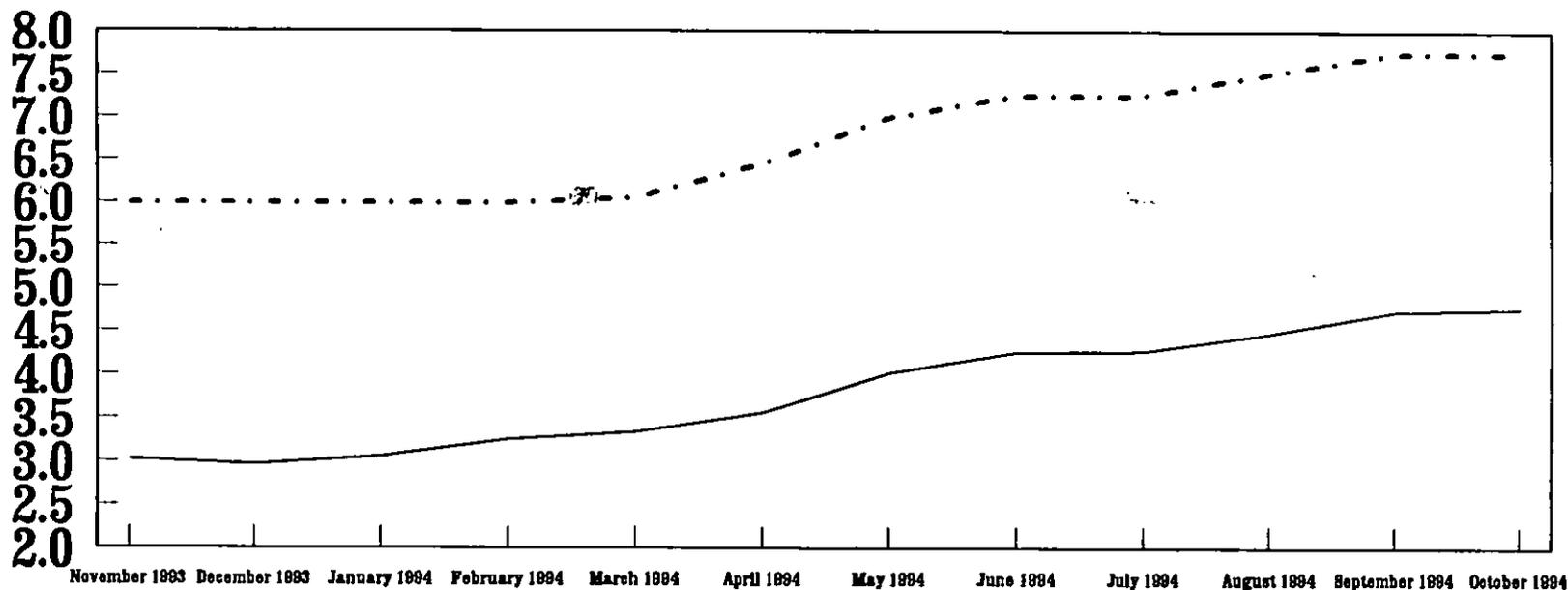
**Interest Rate Trends for Investor-Owned Public Utility Bonds
Yearly for 1989-1993
and the Twelve Months Ended October 1994**

<u>Years</u>	<u>Aaa Rated</u>	<u>Aa Rated</u>	<u>A Rated</u>	<u>Baa Rated</u>	<u>Average</u>
1989	9.32%	9.56%	9.77%	9.97%	9.66%
1990	9.45%	9.66%	9.86%	10.06%	9.76%
1991	8.85%	9.09%	9.36%	9.55%	9.21%
1992	8.19%	8.55%	8.69%	8.86%	8.57%
1993	7.29%	7.44%	7.59%	7.91%	7.56%
Twelve Month Average	7.80%	7.94%	8.04%	8.37%	8.04%

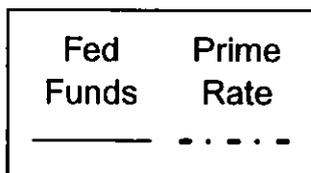
Source of Information : Moody's Investors Services, Inc. (Public Utility Manuals
and Bond Surveys)

Pennsylvania Power & Light Co.
Money Cost Rates
for the Twelve Months ended October 1994

Percent (%)



Yields



S & P Composite Index, S & P Industrial Index,
S & P Public Utility Index,
Long-Term Corporate and Public Utility Bonds
Year-by-Year Total Returns
1928-1993

Year	S & P Composite Index	S & P Industrial Index	S & P Public Utility Index	Long Term Corporate Bonds	Public Utility Bonds
1928	0.4361	0.4512	0.5747	0.0284	0.0308
1929	-0.0842	-0.1550	0.1102	0.0327	0.0234
1930	-0.2490	-0.2645	-0.2198	0.0788	0.0474
1931	-0.4334	-0.4325	-0.3590	-0.0185	-0.1111
1932	-0.0819	-0.1118	-0.0054	0.1082	0.0725
1933	0.5398	0.8615	-0.2187	0.1038	-0.0382
1934	-0.0144	0.0187	-0.2041	0.1384	0.2281
1935	0.4767	0.4500	0.7663	0.0981	0.1603
1936	0.3392	0.3354	0.2069	0.0674	0.0830
1937	-0.3503	-0.3471	-0.3704	0.0275	-0.0405
1938	0.3112	0.3398	0.2245	0.0813	0.0811
1939	-0.0041	-0.0318	0.1126	0.0397	0.0678
1940	-0.0878	-0.0995	-0.1715	0.0339	0.0445
1941	-0.1159	-0.0949	-0.3157	0.0273	0.0215
1942	0.2034	0.2133	0.1539	0.0260	0.0381
1943	0.2590	0.2256	0.4607	0.0283	0.0704
1944	0.1975	0.1777	0.1803	0.0473	0.0329
1945	0.3644	0.3401	0.5333	0.0408	0.0592
1946	-0.0807	-0.0874	0.0126	0.0172	0.0298
1947	0.0571	0.0806	-0.1316	-0.0234	-0.0219
1948	0.0550	0.0519	0.0401	0.0414	0.0265
1949	0.1879	0.1652	0.3139	0.0331	0.0716
1950	0.3171	0.3333	0.0325	0.0212	0.0201
1951	0.2402	0.2531	0.1863	-0.0269	-0.0277
1952	0.1837	0.1760	0.1925	0.0352	0.0299
1953	-0.0099	-0.0193	0.0785	0.0341	0.0208
1954	0.5262	0.5716	0.2472	0.0539	0.0757
1955	0.3156	0.3528	0.1128	0.0048	0.0012
1956	0.0656	0.0756	0.0506	-0.0681	-0.0625
1957	-0.1078	-0.1076	0.0636	0.0871	0.0358
1958	0.4336	0.4295	0.4070	-0.0222	0.0018
1959	0.1195	0.1280	0.0749	-0.0097	-0.0229
1960	0.0047	-0.0140	0.2026	0.0907	0.0901
1961	0.2689	0.2674	0.2933	0.0482	0.0465
1962	-0.0873	-0.0988	-0.0244	0.0795	0.0655
1963	0.2280	0.2388	0.1235	0.0219	0.0344
1964	0.1848	0.1646	0.1591	0.0477	0.0494
1965	0.1245	0.1313	0.0467	-0.0048	0.0050
1966	-0.1006	-0.1049	-0.0448	0.0020	-0.0345
1967	0.2398	0.2714	-0.0063	-0.0495	-0.0363
1968	0.1108	0.1071	0.1032	0.0257	0.0187
1969	-0.0850	-0.0740	-0.1542	-0.0809	-0.0868
1970	0.0401	0.0307	0.1856	0.1837	0.1590
1971	0.1431	0.1504	0.0241	0.1101	0.1159
1972	0.1898	0.2006	0.0815	0.0726	0.0719
1973	-0.1466	-0.1487	-0.1807	0.0114	0.0242
1974	-0.2647	-0.2693	-0.2155	-0.0306	-0.0528
1975	0.3720	0.3717	0.4449	0.1484	0.1550
1976	0.2384	0.2257	0.3181	0.1865	0.1904
1977	-0.0718	-0.0835	0.0884	0.0171	0.0522
1978	0.0656	0.0772	-0.0371	-0.0007	-0.0098
1979	0.1844	0.1887	0.1358	-0.0418	-0.0275
1980	0.3242	0.3403	0.1508	-0.0262	-0.0023
1981	-0.0491	-0.0677	0.1174	-0.0098	0.0427
1982	0.2141	0.2138	0.2662	0.4379	0.3352
1983	0.2251	0.2301	0.2001	0.0470	0.1033
1984	0.0627	0.0420	0.2604	0.1639	0.1482
1985	0.3216	0.3062	0.3305	0.3090	0.2848
1986	0.1847	0.1885	0.2853	0.1985	0.1816
1987	0.0523	0.0873	-0.0292	-0.0027	0.0302
1988	0.1681	0.1593	0.1827	0.1070	0.1019
1989	0.3149	0.2939	0.4780	0.1623	0.1561
1990	-0.0317	-0.0089	-0.0257	0.0878	0.0813
1991	0.3055	0.3078	0.1481	0.1989	0.1925
1992	0.0767	0.0573	0.0811	0.0939	0.0868
1993	0.0999	0.0911	0.1442	0.1319	0.1060
Geometric Mean Return	9.94%	10.09%	8.78%	5.53%	5.35%
Arithmetic Mean Return	11.95%	12.35%	10.98%	5.85%	5.65%
Standard Deviation	20.53%	22.27%	21.97%	8.58%	8.12%
Median Return	13.38%	14.09%	11.26%	3.75%	4.36%

Source of Information : Ibbotson & Associates
Standard & Poor's Security Price Index Record

Tabulation of Risk Rate Differentials for
S&P Public Utility Index and Public Utility Bonds
For the Years 1928-1993, 1952-1993, 1974-1993 and 1979-1993

<u>Total Returns</u>	<u>Range</u>			<u>Point</u>	<u>Average</u> <u>of Midpoint</u> <u>and Point</u> <u>Estimate</u>
	<u>Geometric</u> <u>Mean</u>	<u>Median</u>	<u>Midpoint</u>	<u>Estimate</u> <u>Arithmetic</u> <u>Mean</u>	
<u>1928-1993</u>					
S&P Public Utility Index	8.78%	11.26%		10.98%	
Public Utility Bonds	<u>5.35</u>	<u>4.36</u>		<u>5.65</u>	
Risk Differential	<u>3.43%</u>	<u>6.90%</u>	<u>5.17%</u>	<u>5.33%</u>	<u>5.25%</u>
<u>1952-1993</u>					
S&P Public Utility Index	11.65%	12.05%		12.70%	
Public Utility Bonds	<u>6.23</u>	<u>4.80</u>		<u>6.57</u>	
Risk Differential	<u>5.42%</u>	<u>7.25%</u>	<u>6.34%</u>	<u>6.13%</u>	<u>6.24%</u>
<u>1974-1993</u>					
S&P Public Utility Index	15.39%	14.85%		16.60%	
Public Utility Bonds	<u>10.26</u>	<u>10.26</u>		<u>10.68</u>	
Risk Differential	<u>5.13%</u>	<u>4.59%</u>	<u>4.86%</u>	<u>5.92%</u>	<u>5.39%</u>
<u>1979-1993</u>					
S&P Public Utility Index	17.48%	15.08%		18.15%	
Public Utility Bonds	<u>11.62</u>	<u>10.33</u>		<u>12.00</u>	
Risk Differential	<u>5.86%</u>	<u>4.75%</u>	<u>5.31%</u>	<u>6.15%</u>	<u>5.73%</u>

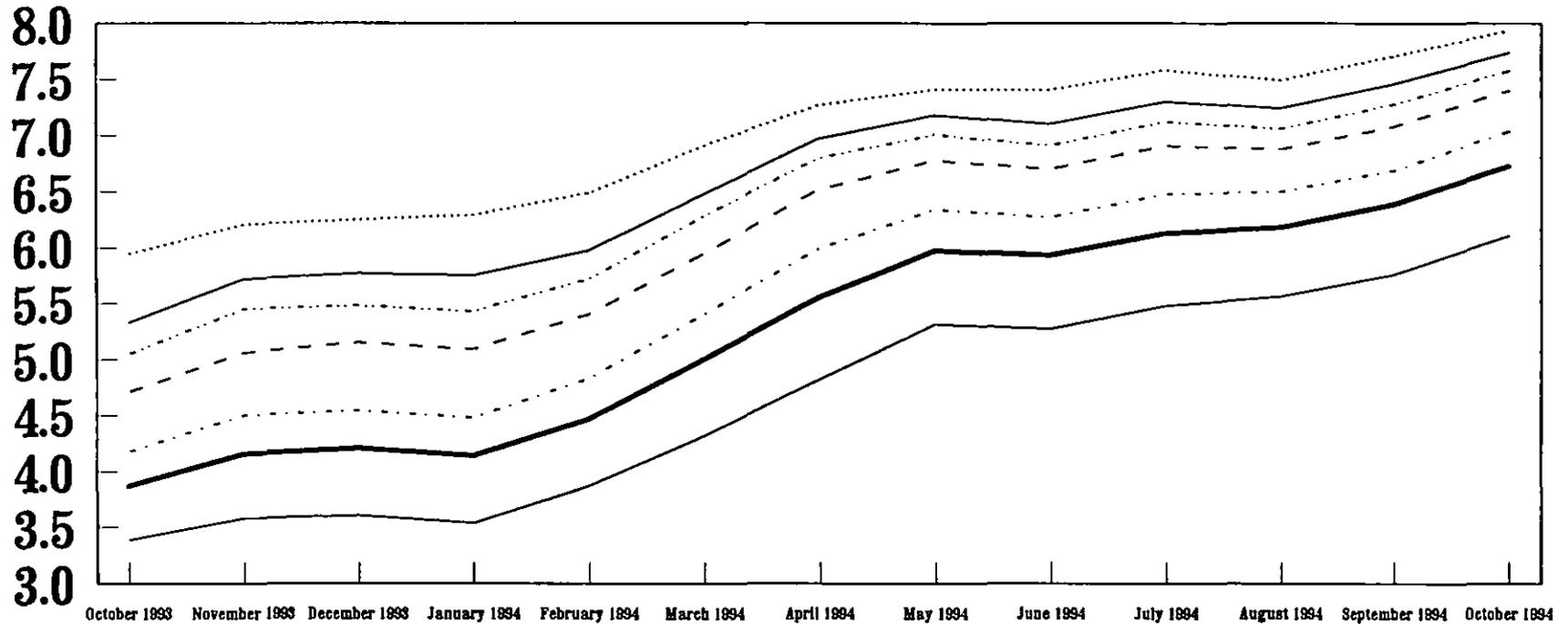
Merrill Lynch and Value Line
Adjusted Betas for Pennsylvania Power & Light Co. and the
Barometer Group of Eight Electric Companies

	<u>Merrill Lynch</u> Adjusted <u>Beta</u>	<u>Value Line</u> Adjusted <u>Beta</u>	Average Adjusted <u>Beta</u>
Pennsylvania Power & Light Co.	<u>0.74</u>	<u>0.65</u>	<u>0.70</u>
Barometer Group of Eight Electric Companies			
Allegheny Power System	0.62	0.65	0.64
American Electric Power	0.76	0.75	0.76
Atlantic Energy Inc	0.66	0.70	0.68
Baltimore Gas & Electric	0.74	0.75	0.75
Delmarva Power & Light	0.57	0.65	0.61
Dpl Inc	0.56	0.55	0.56
Potomac Electric Power	0.74	0.70	0.72
Public Service Entrp	<u>0.75</u>	<u>0.70</u>	<u>0.73</u>
Average	<u>0.68</u>	<u>0.68</u>	<u>0.68</u>

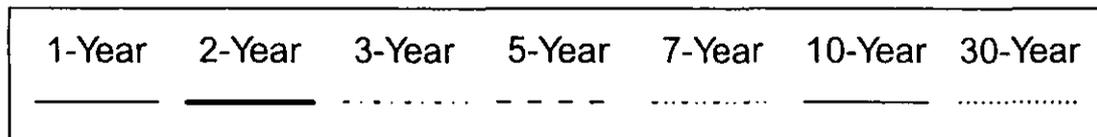
Source of Information : Merrill Lynch Security Price Index, July 1994
Value Line Investment Survey, September 16, 1994 and October 14, 1994

**Pennsylvania Power & Light Co.
Interest Rate Trends
for Treasury Constant Maturities**

Percent (%)



Bond Yields



**Interest Rate Trends for Treasury Constant Maturities
Yearly for 1989-1993
and the Twelve Months Ended October 1994**

<u>Years</u>	<u>1-Year</u>	<u>2-Year</u>	<u>3-Year</u>	<u>5-Year</u>	<u>7-Year</u>	<u>10-Year</u>	<u>30-Year</u>
1989	8.53%	8.57%	8.55%	8.50%	8.52%	8.49%	8.45%
1990	7.88%	8.16%	8.25%	8.37%	8.52%	8.54%	8.61%
1991	5.86%	6.49%	6.81%	7.37%	7.68%	7.86%	8.14%
1992	3.89%	4.77%	5.31%	6.19%	6.63%	7.01%	7.67%
1993	3.43%	4.05%	4.44%	5.15%	5.55%	5.87%	6.60%
Twelve Month Average	4.77%	5.41%	5.76%	6.24%	6.51%	6.72%	7.08%

Source of Information : Federal Reserve Statistical Release

Measures of the Risk Free Rate
Using Blue Chip Financial Forecasts

The forecast 30-year Treasury Bond yields per the consensus of nearly 50 economists reported in the Blue Chip Financial Forecasts dated November 1, 1994.

	<u>Treasury Note Yield</u> <u>10-Year</u>	<u>Treasury Bond Yield</u> <u>30-Year</u>
Fourth Quarter 1994	7.9%	8.1%
First Quarter 1995	8.1	8.2
Second Quarter 1995	8.1	8.2
Third Quarter 1995	8.0	8.2
Fourth Quarter 1995	8.0	8.1

Source of Information: Blue Chip Financial Forecasts, December 1, 1994

November 18, 1994

TABLE OF SUMMARY-INDEX CONTENTS		Summary-Index Page Number	
Industries, in alphabetical order		1	
Stocks—complete list with latest prices, Timeliness and Safety Ranks, Betas, estimated earnings, estimated dividends, and option exchanges; also references to pages in Ratings & Reports carrying latest full-page reports		2-23	
Noteworthy Rank Changes		24	
SCREENS			
Industries, in order of Timeliness Rank	24	Low P/E stocks	35
Timely stocks in Timely industries	25-26	High P/E stocks	35
Timely stocks (1 & 2 for Performance)	27-29	High total return stocks	36
Conservative stocks (1 & 2 for Safety)	30-31	High 3- to 5-year dividend returns	36
High Yielding stocks	32	Companies with high return on capital	37
High 3- to 5-year appreciation	32	Bargain Basement stocks	37
Cash generating companies	33	Untimely stocks (5 for Performance)	38
Best Performing stocks last 13 weeks	33	High yielding non-utility stocks	38
Poorest Performing stocks last 13 weeks	33	High growth stocks	39
Stocks below book value	34	Stock market averages	40

The Median of Estimated
PRICE-EARNINGS RATIOS
of all stocks with earnings

14.5

26 Weeks Ago*	Market Low	Market High
15.2	12-23-74* 4.8	9-4-87* 16.9

The Median of
ESTIMATED YIELDS
(next 12 months) of all dividend
paying stocks under review

2.6%

26 Weeks Ago*	Market Low	Market High
2.6%	12-23-74* 7.8%	9-4-87* 2.3%

The Estimated Median
APPRECIATION POTENTIAL
of all 1700 stocks in the hypothesized
economic environment 3 to 5 years hence

70%

26 Weeks Ago*	Market Low	Market High
70%	12-23-74* 234%	9-4-87* 40%

*Estimated medians as published in *The Value Line Investment Survey* on the dates shown.

ANALYSES OF INDUSTRIES IN ALPHABETICAL ORDER WITH PAGE NUMBER

Numeral in parenthesis after the industry is rank for probable performance (next 12 months).

	PAGE		PAGE		PAGE		PAGE
Advertising (8)	1822	Diversified Co. (26)	1358	Insurance (Prop/Casualty) (83)	621	R.E.I.T. (79)	1169
Aerospace/Defense (59)	551	Drug (36)	1257	Investment Co. (Domestic) (49)	2090	Recreation (63)	1751
Air Transport (45)	251	Drugstore (12)	797	Investment Co. (Foreign) (33)	356	Restaurant (70)	296
Aluminum (21)	1231	Electrical Equipment (66)	1001	Investment Co. (Income) (54)	970	Retail Building Supply (14)	885
Apparel (84)	1601	Electric Util. (Central) (92)	701	Machinery (37)	1301	Retail (Special Lines) (71)	1667
Auto & Truck (45)	101	Electric Utility (East) (96)	157	Machinery (Const&Mining) (27)	1346	Retail Store (74)	1627
Auto & Truck (Foreign) (82)	108	Electric Utility (West) (85)	1721	Machine-Tool (68)	1338	Securities Brokerage (89)	1185
Auto Parts (OEM) (78)	808	Electronics (5)	1020	Manuf. Housing/Rec Veh (13)	1541	Semiconductor (1)	1056
Auto Parts (Replacement) (10)	114	Environmental (56)	342	Maritime (94)	277	Shoe (61)	1656
Bank (31)	2001	European Diversified (67)	830	Medical Services (2)	665	Steel (General) (57)	603
*Bank (Canadian) (87)	1565	Financial Services (32)	2044	Medical Supplies (19)	193	Steel (Integrated) (9)	1409
Bank (Midwest) (40)	643	*Food Processing (48)	1451	Metal Fabricating (25)	589	Telecom. Equipment (15)	775
*Beverage (Alcoholic) (65)	1525	*Food Wholesalers (60)	1514	Metals & Mining (Div.) (6)	1231	Telecom. Services (52)	745
*Beverage (Soft Drink) (4)	1533	*Foreign Electron/Entern (42)	1550	Natural Gas (Distrib.) (95)	470	Textile (81)	1615
Broadcasting/Cable TV (69)	377	Foreign Telecom. (77)	782	Natural Gas (Diversified) (75)	449	Thrift (43)	1151
Building Materials (39)	851	Furn/Home Furnishings (91)	901	Newspaper (28)	1805	Tire & Rubber (53)	123
Canadian Energy (22)	432	Gold/Silver Mining (55)	1214	*Office Equip & Supplies (50)	1116	Tobacco (62)	1572
Cement & Aggregates (38)	892	*Grocery (18)	1494	Oilfield Services/Equip. (29)	1848	Toiletries/Cosmetics (30)	820
Chemical (Basic) (3)	1247	Home Appliance (23)	129	Packaging & Container (16)	943	Toys (90)	1891
Chemical (Diversified) (24)	1871	Homebuilding (86)	873	Paper & Forest Products (73)	911	Trucking/Transp. Leasing (41)	264
Chemical (Specialty) (44)	498	Hotel/Gaming (72)	1771	Petroleum (Integrated) (80)	401	Water Utility (93)	1418
Coal/Alternate Energy (88)	1866	Household Products (34)	957	Petroleum (Producing) (64)	1830		
Computer & Peripherals (7)	1074	Industrial Services (20)	316	Precision Instrument (35)	136		
Computer Software & Svcs (11)	2102	Insurance (Diversified) (76)	2073	Publishing (51)	1787		
Copper (47)	1232	Insurance (Life) (58)	1199	Railroad (17)	283		

*Reviewed in this week's edition.

In three parts: This is Part 1, the Summary & Index. Part 2 is Selection & Opinion. Part 3 is Ratings & Reports. Volume L, No. 10.
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Pennsylvania Power & Light Co.
Cost of Capital and Fair Rate of Return
Estimated at September 30, 1995

<u>Type of Capital</u>	<u>Ratios</u>	<u>Cost Rate</u>	<u>Weighted Cost Rate</u>
Long-Term Debt	46.53%	7.97%	3.71%
Preferred Stock	7.59%	7.31%	0.55%
Common Equity	<u>45.88%</u>	<u>13.00%</u>	<u>5.96%</u>
Overall Cost of Capital	<u>100.00%</u>		<u>10.22%</u>

Indicated level of fixed coverage assuming the Company could actually achieve a 10.22% overall rate of return.

Before-income tax coverage of interest expense based upon a 42.1435% effective federal and state income tax rate.
 (14.96% / 3.71%)

4.03x

After-income tax coverage of interest expense
 (10.22% / 3.71%)

2.75x

Overall coverage of interest expense and preferred stock dividends (10.22% / 4.26%)

2.40x

PP&L E&L CDB-1
R-00943271
3/21/95
Handy P/B
w/jh

PENNSYLVANIA POWER & LIGHT COMPANY

**Exhibit CDB-1
Preliminary Actuarial Report for
Fiscal Year Ending December 31, 1995 and
Plan Year Beginning January 1, 1995**

DOCKETED
JUN 13 1995

**Witness: Clyde D. Beers
Docket No. R-00943271**

**DOCUMENT
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Pennsylvania Power & Light Company
Postretirement Welfare Plans

Preliminary Actuarial Report for Fiscal Year Ending December 31, 1995

and

Plan Year Beginning January 1, 1995

December 1994

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Management Summary of Valuation Results

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Highlights

On January 1, 1993, Pennsylvania Power & Light Company adopted Financial Accounting Standard No. 106 (FAS 106). This preliminary report summarizes the financial results for Pennsylvania Power & Light Company's postretirement welfare plan assuming a discount rate of 7.5% as of January 1, 1995.

Results are based upon actuarial valuations of the postretirement medical and life insurance benefits as of January 1, 1995 and January 1, 1994.

	January 1, 1995	January 1, 1994
FAS 106 Cost		
Dollar amount	\$ 25,856,836	\$ 25,684,559
Percent of payroll	6.6%	6.2%
Employer Cash Flow		
Funding policy contribution	\$ 25,856,836	\$ 28,096,273
Percent of payroll	6.6%	6.8%
Funded Status		
Fair value of assets (FV)	\$ 23,398,963	\$ 14,848,470
Accumulated postretirement benefit obligation (APBO)	206,916,219	202,972,750
APBO funded percentage (FV + APBO)	11.3%	7.3%
Unrecognized Obligation		
Accrued postretirement benefit cost (APBC)	\$ 11,323,038	\$ 2,411,714
Unrecognized APBO (APBO - FV - APBC)	172,194,218	185,712,566

Major Events

Economic Environment

The discount rates for FAS 106 cost purposes reflect the time value of money as of the measurement date. These rates are usually based on investment-grade bond yields, after allowing for call and default risk. In fiscal 1994 the yields on government and corporate bonds generally increase. The yields shown for 1994 are the latest available.

	October 31, 1994	December 31, 1993
PBGC immediate	5.50%	4.25%
10-year Treasury Bonds	7.81%	5.83%
30-year Treasury Bonds	7.97%	6.35%
Merrill Lynch 10+ high quality corporate	8.65%	7.22%
Moody's BAA	9.21%	7.77%

Economic Assumptions

For FAS 106 cost purposes, Pennsylvania Power & Light Company changed its discount assumption to reflect the increase in market rates during the year. The salary increase rate assumption was unchanged.

	January 1, 1995	January 1, 1994
FAS 106:		
▶ Discount rate for obligations	7.50%	7.00%
▶ Salary increase rate	5.70%	5.70%
▶ Return on plan assets	6.50%	6.50%

The return on plan asset assumption reflects the short-term investment policy for plan assets in place until the regulatory environment of plan funding is clarified.

Retiree Health Care Costs

The assumed 1995 incurred claims per capita were based on paid claims over the past three years, adjusted for claim lag, trend, demographic changes, and plan changes.

	<i>Prior to age 65</i>	<i>Age 65 and after</i>
1995 cost assumed in current valuation	\$ 3,634	\$ 1,623
1994 cost assumed in prior valuation	3,496	1,553
1995 cost assumed in prior valuation	3,874	1,808

Trend Rates

Trend rates in the short term are typically related to the recent history of health care cost increases, while the ultimate trend is related to the general economic environment. Health care cost trend is the rate of increase in health care charges. Health care cost trend is disclosed in the company's financial statements. Plan trend is the rate of increase in plan benefits. Plan trend equals health care cost trend plus the effect of specific plan provisions.

The underlying CPI and medical CPI continued at low levels during 1994. The change shown for 1994 reflects the change to October 31, 1994.

	1994	1993
Consumer Price Index change		
▶ Total index	2.38%	2.95%
▶ Medical component	4.86%	5.97%

Based upon the inflation implicit in the discount rates and the recent increases in health care costs, the assumptions used in the valuations are:

Health Care Cost Trend

	January 1, 1995		January 1, 1994	
	<i>Prior to age 65</i>	<i>Age 65 and after</i>	<i>Prior to age 65</i>	<i>Age 65 and after</i>
1994 trend	N/A	N/A	10.00%	10.00%
1995 trend	9.00%	9.00%	9.00%	9.00%
Ultimate trend	6.00%	6.00%	6.00%	6.00%
Years to reach ultimate	11	11	12	12

Plan Trend

	January 1, 1995		January 1, 1994	
	<i>Prior to age 65</i>	<i>Age 65 and after</i>	<i>Prior to age 65</i>	<i>Age 65 and after</i>
1994 trend	N/A	N/A	10.80%	11.40%
1995 trend	9.60%	10.10%	9.60%	10.10%
Ultimate trend	6.40%	6.50%	6.40%	6.50%
Years to reach ultimate	11	11	12	12

Asset Return

Pennsylvania Power & Light Company's investment portfolio consists of approximately 0% equities and 100% bonds. In 1994 the fund is projected to achieve a 1.49% investment return, while the capital markets performed as follows for the first 10 months of 1994.

Large equities (S&P 500 Index)	3.94%
Intermediate/small equities (Frank Russell 2500 Index)	1.83%
Non-U.S. equities (EAFE Index)	10.38%
Bonds (Lehman Brothers Aggregate Index)	-3.67%
Cash equivalents (Salomon Brothers 90-Day T-Bill Index)	3.84%

Other Changes

- ▶ The voluntary retirement program as of January 1, 1995 was recognized assuming an acceptance rate of 60% for employees between the ages of 55 and 59 and 95% for employees age 60 and above.

FAS 106 Cost

Net periodic postretirement benefit cost (FAS 106 cost) is the amount an employer must recognize in its financial statement as the cost of retiree welfare plans. It is determined in accordance with Financial Accounting Standards Board Statement No. 106. FAS 106 cost for the plan is \$25.9 million for fiscal 1995, or 6.6% of payroll.

Change in Cost Since Prior Year

FAS 106 cost increased from \$25.7 million in fiscal 1994 to \$25.9 million primarily because:

- ▶ Expected changes, which were anticipated in the assumptions, increased FAS 106 cost \$0.4 million.
- ▶ Plan experience was different from that expected, which decreased FAS 106 cost \$1.3 million.
- ▶ The rate of return on the fair value of assets was projected to be 1.49% in fiscal 1994. Asset experience increased cost \$0.1 million.
- ▶ Changes in actuarial assumptions decreased FAS 106 cost \$0.4 million.
- ▶ The voluntary retirement program increased FAS 106 cost \$1.4 million.

The net increase in FAS 106 cost is \$0.2 million, or 0.7% over the prior year.

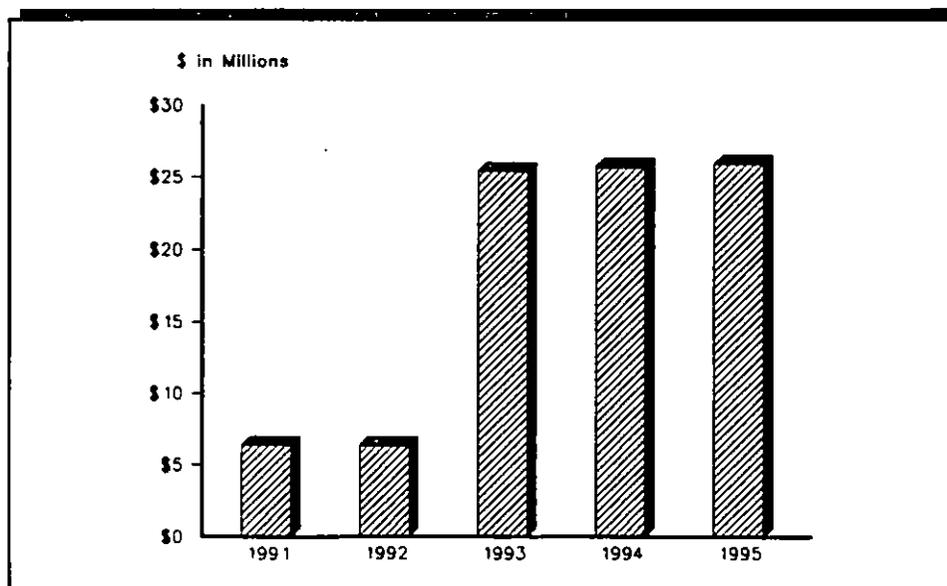
Pattern of Cost

FAS 106 cost has increased in 1994 due to a decrease in discount rates and in 1995 due primarily to the 1994 early retirement program. Costs prior to fiscal 1993 were equal to employer cash flow.

History of Cost		
<i>Fiscal year</i>	<i>Amount</i>	<i>Percent of payroll</i>
1995	\$ 25,856,836	6.6%
1994	25,684,559	6.2
1993	25,398,041	6.2
1992	6,417,380	1.6
1991	6,353,729	1.7

The chart that follows shows the postretirement welfare cost on a funding basis for pre-adoption years (before 1993) and on FAS 106 accounting standard beginning in 1993:

FAS 106 Cost



Forecast

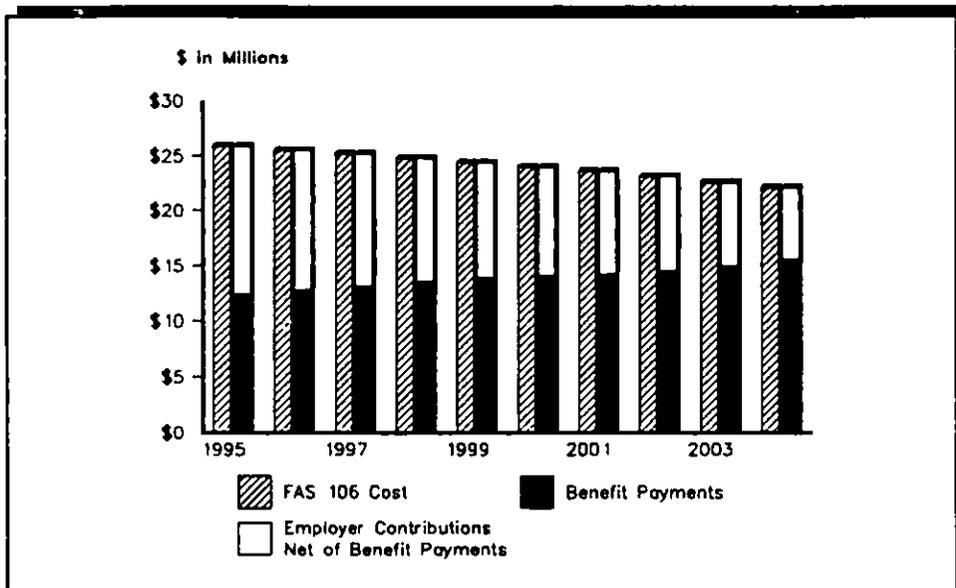
FAS 106 cost is generally expected to decrease as a dollar amount and as a percentage of payroll over the next 10 years because of PP&L's policy to fund benefit obligations. This assumes that all assumptions used in the valuation are realized over that period.

Over the 10-year period, expected FAS 106 cost decreases from \$25.9 million to \$22.1 million. It decreases from 6.6% of payroll to 3.7% of payroll due to the amortization of the transition obligation, which is constant over the 10-year period, and due to the funding policy which is expected to result in increasing returns on assets (which reduce FAS cost).

Based on the company's funding policy, FAS 106 costs and company contributions are expected to be identical.

For projections, the active work force was assumed to remain constant, after reflecting reductions in employment due to the 1994 early retirement program.

Projected FAS 106 Cost and Contributions



Funded Status

The funded status is measured by comparing the fair value of assets with the accumulated postretirement benefit obligation (APBO). The APBO is the portion of the total present value of projected benefits allocated to prior years.

The plan's funded percentage (fair value of assets divided by APBO) is 11.3% as of January 1, 1995. This percentage is based on a fair value of assets of \$23.4 million and an APBO of \$206.9 million.

Change in Funded Status Since Prior Year

The funded percentage increased from 7.3% as of January 1, 1994 to 11.3% as of January 1, 1995 primarily because:

- ▶ Expected changes, which were anticipated in the assumptions, increased funded percentage by 4.2%.
- ▶ Plan experience was different than expected, which increased the funded percentage 0.8%.
- ▶ The fair value of assets was projected to return 1.5%, which decreased the funded percentage 0.6%.
- ▶ Changes in long-term interest rates resulted in the increase of the discount rate, which increased the funded percentage 0.8%.
- ▶ The Voluntary Retirement Program decreased the funded percentage 1.2%.

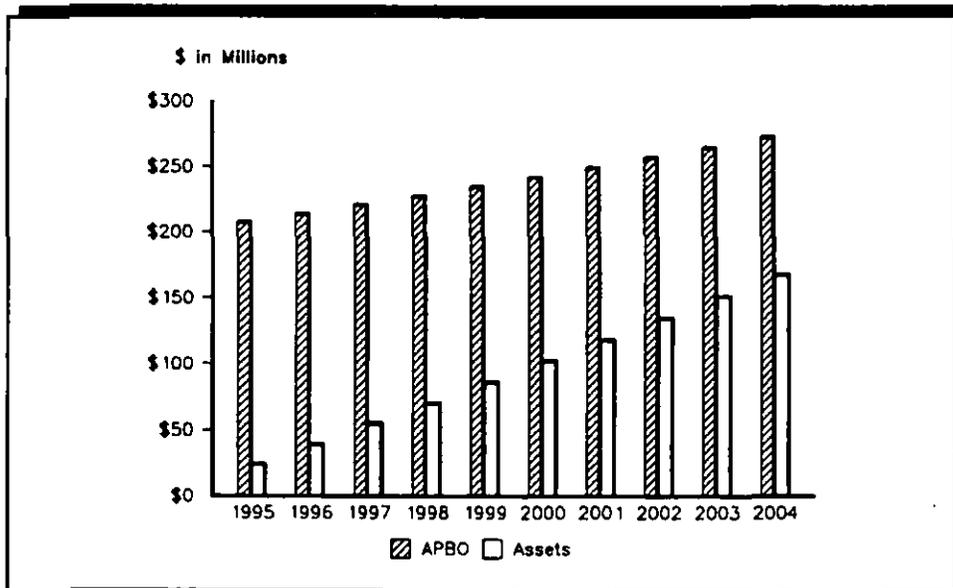
Forecast

The APBO is expected to grow from \$206.9 million in fiscal 1995 to \$272.1 million by fiscal 2004. This represents an average rate of increase of 3.1% per year over the next 10 years.

Funded percentages are generally expected to increase in the next 10 years as assets will tend to increase faster than liabilities. This assumes a continuation of the current funding policy, and assumes that all assumptions used in the valuation are realized over the next 10 years.

The funded percentage is expected to grow from 11.3% in fiscal 1995 to 61.3% by the end of the 10-year period.

For projections, the active work force is assumed to remain constant.

Projected FAS 106 Funded Status

Supplemental Information

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Asset Values

Fair Value

As of January 1, 1994	\$ 14,848,470
Estimated employer contributions during the year	16,773,235*
Retiree contributions during the year	0
Assumed disbursements during the year	8,500,809
Assumed investment return during the year	278,067
Estimated as of January 1, 1995	\$ 23,398,963
Rate of return	1.49%

Market-Related Value for FAS 106 Cost

As of January 1, 1994	\$ 14,848,470
As of January 1, 1995	23,398,963
Rate of return	1.49%

- * Includes contributions of \$8,172,426 to existing VEBA accounts plus \$100,000 to establish a new MCP medical account VEBA plus \$8,500,809 in estimated disbursements.

Basic Results for FAS 106 Cost

	January 1, 1995			January 1, 1994
	Union	MCP	Total	
Service Cost				
Medical	\$ 1,756,672	\$ 970,150	\$ 2,726,822	\$ 3,186,712
Life insurance	<u>379,064</u>	<u>604,839</u>	<u>983,903</u>	<u>1,099,279</u>
Total	\$ 2,135,736	\$ 1,574,989	\$ 3,710,725	\$ 4,285,991
Accumulated Postretirement Benefit Obligation (APBO)				
Medical:				
▶ Active employees fully eligible for benefits	\$ 6,267,823	\$ 4,425,071	\$ 10,692,894	\$ 25,707,879
▶ Other active employees	31,191,783	19,329,683	50,521,466	55,704,402
▶ Current retirees	<u>54,813,859</u>	<u>47,299,417</u>	<u>102,113,276</u>	<u>77,320,646</u>
▶ Total	\$ 92,273,465	\$ 71,054,171	\$ 163,327,636	\$ 158,732,927
Life insurance:				
▶ Active employees fully eligible for benefits	\$ 1,023,335	\$ 1,887,294	\$ 2,910,629	\$ 7,033,684
▶ Other active employees	6,687,069	11,619,892	18,306,961	19,480,428
▶ Current retirees	<u>8,059,388</u>	<u>14,311,605</u>	<u>22,370,993</u>	<u>17,725,711</u>
▶ Total	\$ 15,769,792	\$ 27,818,791	\$ 43,588,583	\$ 44,239,823
All benefits:				
▶ Active employees fully eligible for benefits	\$ 7,291,158	\$ 6,312,365	\$ 13,603,523	\$ 32,741,563
▶ Other active employees	37,878,852	30,949,575	68,828,427	75,184,830
▶ Current retirees	<u>62,873,247</u>	<u>61,611,022</u>	<u>124,484,269</u>	<u>95,046,357</u>
▶ Total	\$ 108,043,257	\$ 98,872,962	\$ 206,916,219	\$ 202,972,750

	January 1, 1995			January 1, 1994
	Union	MCP	Total	
Additional Obligation for Future Service				
Medical	\$ 15,252,207	\$ 8,049,472	\$ 23,301,679	\$ 28,673,010
Life insurance	<u>3,702,177</u>	<u>5,622,684</u>	<u>9,324,861</u>	<u>10,940,165</u>
Total	\$ 18,954,384	\$ 13,672,156	\$ 32,626,540	\$ 39,613,175
Expected Postretirement Benefit Obligation (EPBO)				
Medical	\$ 107,525,672	\$ 79,103,643	\$ 186,629,315	\$ 187,405,937
Life insurance	<u>19,471,969</u>	<u>33,441,475</u>	<u>52,913,444</u>	<u>55,179,988</u>
Total	\$ 126,997,641	\$ 112,545,118	\$ 239,542,759	\$ 242,585,925
Assets				
Fair value (FV)	\$ 18,460,817	\$ 4,938,146	\$ 23,398,963	\$ 14,848,470
Unrecognized investment losses (gains)	0	0	0	0
Market-related value (MRV)	18,460,817	4,938,146	23,398,963	14,848,470
Funded Status				
Unfunded APBO (APBO - FV)	\$ 89,582,440	\$ 93,934,816	\$ 183,517,256	\$ 188,124,280
APBO funded percentage (FV + APBO)	17.1%	5.0%	11.3%	7.3%

January 1, 1995 January 1, 1994

Key Economic Assumptions

Discount rate	7.50%	7.00%
Salary increase rate	5.70%	5.70%
Pre-tax return on plan assets	6.50%	6.50%
Post-tax rate*	3.58%	3.58%
Plan trend (prior to age 65):		
▶ First year	9.60%	10.80%
▶ Ultimate	6.40%	6.40%
▶ Years to reach ultimate	11	12
Plan trend (age 65 and after):		
▶ First year	10.10%	11.40%
▶ Ultimate	6.50%	6.50%
▶ Years to reach ultimate	11	12

* Applicable only to management medical VEBA investment income.

FAS 106 Cost

	January 1, 1995			January 1, 1994
	Union	MCP	Total	
FAS 106 Cost				
Service cost	\$ 2,135,736	\$ 1,574,989	\$ 3,710,725	\$ 4,285,991
Interest cost	8,028,286	7,310,605	15,338,891	14,189,241
Expected return on assets	(1,416,605)	(467,748)	(1,884,353)	(1,497,071)
Amortization of:				
▶ Transition obligation	4,411,192	4,280,381	8,691,573	8,691,573
▶ Prior service cost	0	0	0	0
▶ Losses (gains)	<u>0</u>	<u>0</u>	<u>0</u>	<u>14,825</u>
▶ Total	\$ 4,411,192	\$ 4,280,381	\$ 8,691,573	\$ 8,706,398
FAS 106 cost	13,158,609	12,698,227	25,856,836	25,684,559
Percent of payroll	6.2%	7.2%	6.6%	6.2%
Per active employee	\$ 2,872	\$ 4,966	\$ 3,622	\$ 3,257

Change in FAS 106 Cost

FAS 106 cost for fiscal 1994	\$ 25,684,559
Change from fiscal 1994 to fiscal 1995:	
▶ Expected change	403,415
▶ Actuarial loss (gain) from plan experience	(1,311,172)
▶ Actuarial loss (gain) from assets	79,235
▶ Change in assumptions	(408,579)
▶ Change in plan provisions	0
▶ Voluntary retirement program	<u>1,409,378</u>
FAS 106 cost for fiscal 1995	\$ 25,856,836

Other Accounting Information

	January 1, 1995	January 1, 1994
Reconciliation of Funded Status		
Accumulated postretirement benefit obligation (APBO):		
▶ Active employees fully eligible for benefits	\$ (13,603,523)	\$ (32,741,563)
▶ Other active employees	(68,828,427)	(75,184,830)
▶ Current retirees	<u>(124,484,269)</u>	<u>(95,046,357)</u>
▶ Total	\$ (206,916,219)	\$ (202,972,750)
Fair value of assets	<u>23,398,963</u>	<u>14,848,470</u>
APBO (in excess of) less than fair value of assets	\$ (183,517,256)	\$ (188,124,280)
Unrecognized amounts:		
▶ Transition obligation (asset)	156,448,305	165,139,878
▶ Prior service cost	0	0
▶ Net loss (gain)	<u>15,745,913</u>	<u>20,572,688</u>
▶ Total	\$ 172,194,218	\$ 185,712,566
Prepaid (accrued) postretirement benefit cost	\$ (11,323,038)	\$ (2,411,714)
Effect of One-Percentage-Point Increase in Health Care Cost Trend		
Increase in components of FAS 106 cost:		
▶ Service cost	\$ 227,364	\$ 292,607
▶ Interest cost	<u>724,475</u>	<u>802,652</u>
▶ Total	\$ 951,839	\$ 1,095,259
Increase in APBO	9,432,290	11,173,850

**Development of Prepaid
(Accrued) Postretirement
Benefit Cost**

Prepaid (accrued) postretirement benefit cost, January 1, 1994	\$ (2,411,714)
Cost recognized during the year	(25,684,559)
Employer cash flow during the year	<u>16,773,235</u>
Prepaid (accrued) postretirement benefit cost, January 1, 1995	\$ (11,323,038)

Note: This table uses the FAS 106 sign convention. The amounts shown are based on data as of the valuation date, which may not have been available when the company's financial statement was prepared. Therefore, these amounts may differ from those in the financial statement.

Incurred Benefits and Administrative Expenses

	Projected 1995		
	Union	MCP	Total
Medical			
Gross disbursements	\$ 5,516,742	\$ 4,706,166	\$ 10,222,908
Retiree contributions	<u>0</u>	<u>0</u>	<u>0</u>
Disbursements	\$ 5,516,742	\$ 4,706,166	\$ 10,222,908
Life insurance			
Gross disbursements	\$ 869,037	\$ 1,349,735	\$ 2,218,772
Retiree contributions	<u>0</u>	<u>0</u>	<u>0</u>
Disbursements	\$ 869,037	\$ 1,349,735	\$ 2,218,772
Total			
Gross disbursements	\$ 6,385,779	\$ 6,055,901	\$ 12,441,680
Retiree contributions	<u>0</u>	<u>0</u>	<u>0</u>
Disbursements	\$ 6,385,779	\$ 6,055,901	\$ 12,441,680

Forecast Results appear on the following page.

Forecast Results (dollars in thousands)

	1995	1996	1997	1998
FAS 106 Cost				
Amount	\$ 25,857	\$ 25,512	\$ 25,196	\$ 24,753
Percent of estimated payroll	6.6%	6.2%	5.8%	5.4%
Employer Cash Flow				
Amount	\$ 25,857	\$ 25,512	\$ 25,196	\$ 24,753
Percent of payroll	6.6%	6.2%	5.8%	5.4%
Incurred Benefits and Expenses				
Gross	\$ 12,442	\$ 12,784	\$ 13,229	\$ 13,628
Retiree contributions	0	0	0	53
Net	12,442	12,784	13,229	13,575
Funded Status				
APBO	\$ 206,916	\$ 213,524	\$ 220,289	\$ 227,148
Fair value of assets	23,399	38,698	54,155	69,706
Funded percentage	11.3%	18.1%	24.6%	30.7%
Unrecognized Obligation				
Accrued postretirement benefit cost	\$ 11,323	\$ 11,323	\$ 11,323	\$ 11,323
Unrecognized obligation	172,194	163,503	154,811	146,119
Demographics				
Active employees	7,138	7,138	7,138	7,138
Retirees	2,692	2,594	2,499	2,410
Total	9,830	9,732	9,637	9,548
Estimated payroll	\$ 390,000	\$ 411,527	\$ 433,868	\$ 456,971
Key Economic Assumptions				
Discount rate	7.50%	7.50%	7.50%	7.50%
After-tax return on plan assets				
▸ Management medical	3.58%	3.58%	3.58%	3.58%
▸ Union medical and life insurance	6.50%	6.50%	6.50%	6.50%
Salary increase rate	5.70%	5.70%	5.70%	5.70%
Plan trend:				
▸ Prior to age 65	9.60%	9.60%	8.50%	8.50%
▸ Age 65 and after	10.10%	10.00%	8.80%	8.80%

1999	2000	2001	2002	2003	2004
\$ 24,381	\$ 23,993	\$ 23,629	\$ 23,076	\$ 22,579	\$ 22,118
5.1%	4.8%	4.5%	4.2%	3.9%	3.7%
\$ 24,381	\$ 23,993	\$ 23,629	\$ 23,076	\$ 22,579	\$ 22,118
5.1%	4.8%	4.5%	4.2%	3.9%	3.7%
\$ 14,127	\$ 14,706	\$ 15,302	\$ 16,131	\$ 17,326	\$ 18,608
230	568	1,085	1,620	2,309	3,056
13,897	14,138	14,217	14,511	15,017	15,552
\$ 234,080	\$ 241,190	\$ 248,559	\$ 256,392	\$ 264,303	\$ 272,138
85,329	101,131	117,191	133,715	150,318	166,844
36.5%	41.9%	47.1%	52.2%	56.9%	61.3%
\$ 11,323	\$ 11,323	\$ 11,323	\$ 11,323	\$ 11,323	\$ 11,323
137,428	128,736	120,045	111,354	102,662	93,971
7,138	7,138	7,138	7,138	7,138	7,138
2,331	2,261	2,201	2,169	2,162	2,187
9,469	9,399	9,339	9,307	9,300	9,325
\$ 480,481	\$ 504,526	\$ 528,887	\$ 552,591	\$ 575,799	\$ 598,484
7.50%	7.50%	7.50%	7.50%	7.50%	7.50%
3.58%	3.58%	3.58%	3.58%	3.58%	3.58%
6.50%	6.50%	6.50%	6.50%	6.50%	6.50%
5.70%	5.70%	5.70%	5.70%	5.70%	5.70%
8.50%	7.90%	7.90%	7.40%	7.40%	6.80%
8.80%	8.20%	8.20%	7.60%	7.60%	7.00%

Actuarial Assumptions and Methods

FAS 106 Cost

Economic Assumptions

Discount rate	7.50%
Pre-tax return on plan assets	6.50%
After-tax rate of return on plan assets	3.58%
Salary increase rate	5.70%

Medical Benefit Assumptions

Average per capita claims cost:

	<i>Age</i>	<i>Retiree</i>	<i>Dependents</i>
▶ Overall average	< 65	\$ 3,634	\$3,163
	≥ 65	1,693	1,429
▶ Prior to age 65	< 55	2,238	2,450
	55 - 59	2,986	2,986
	60 - 64	3,770	3,423
▶ Age 65 and after (net of Medicare)	65 - 69	1,418	1,198
	70 - 74	1,566	1,366
	75 - 79	1,805	1,470
	80 - 84	1,977	1,610
	≥ 85	2,049	1,668

FAS 106 Cost

Plan trend rate:

- ▶ Medical costs prior to age 65 9.60% in 1995 reducing for 11 years, reaching 6.40% in 2006 and after.
- ▶ Medical costs age 65 and later 10.1% in 1995 reducing 11 years, reaching 6.50% in 2006 and after, adjusted for balance billing limits.
- ▶ Medicare covered charges Same as age 65 and later medical cost increases, adjusted for balance billing limits.
- ▶ Medicare Part A deductible Same as age 65 and later cost increases.
- ▶ Retiree contributions Same as applicable to medical cost increases.

Administrative expenses Included in above per capita costs.

Demographic Assumptions

FAS 106 cost:

- ▶ Mortality 1983 Group Annuity Mortality Table
- ▶ Termination Rates varying by age and sex.
Sample rates:

<i>Age</i>	<i>Male</i>	<i>Female</i>
25	0.050	0.072
40	0.000	0.000
55	0.000	0.000
- ▶ Disability None
- ▶ Retirement Rates varying by age, with average retirement age of 62.
Sample rates:

<i>Age</i>	<i>Rate</i>
55	1%
62	25%
65	75%
67	100%
- ▶ Percentage married 85% males; 50% females.

- ▶ Spouse ages Wives 3 years younger than husbands.
- ▶ Pay Annualized base salary as of July 1, 1994 increased by the assumed rate of salary increase to estimate the January 1, 1995 rate of pay.
- ▶ Participation rates

	<i>Employee</i>	<i>Dependent</i>
Medical	100%	100%
Life insurance	100%	N/A

Employer contributions Same as FAS 106 cost assumptions.

Forecast Assumptions

FAS 106 cost:

- ▶ Forecast valuation Same as January 1, 1995 valuation.
- ▶ Asset experience Return follows valuation assumptions.
- ▶ Claims experience Cost increases follow valuation assumptions.
- ▶ Demographic Experience follows valuation assumptions.
- ▶ Population Constant number of active employees.
- ▶ New employee distribution

<i>Hire age</i>	<u><i>Union</i></u>		<u><i>MCP</i></u>		<i>Total</i>
	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>	
< 25	0.0%	0.0%	0.0%	0.0%	0.0%
25 - 29	42.0	0.0	16.0	0.0	58.0
30 - 39	0.0	36.0	0.0	6.0	42.0
≥ 40	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>	<u>0.0</u>
Total	42.0	36.0	16.0	6.0	100.00

Employer contributions Same as FAS 106 cost assumptions.

Actuarial Methods

FAS 106 cost:

- ▶ Service cost and APBO Projected unit credit actuarial cost method, allocated from date of hire to full eligibility date.
- ▶ Market-related value of assets The market-related value is equal to the fair value.

- ▶ Development of claims cost Weighted average of experience for 1991, 1992, and 1993 projected to 1995 using trend factors of 11% for 1991 to 1992, 10% for 1992 to 1993, and 9% thereafter.
- Employer contributions:
- ▶ Normal cost and actuarial accrued liability Entry age normal actuarial cost method; entry age not before January 1, 1993.
 - ▶ Actuarial value of assets The actuarial value of assets is equal to the fair value.
 - ▶ Development of claims cost Weighted average of experience for 1991, 1992, and 1993 projected to 1995 using trend factors of 11% for 1991 to 1992, 10% for 1992 to 1993, and 9% thereafter.

Benefits Not Valued All benefits were valued.

Change in Methods and Assumptions Since Last Year

- FAS 106 cost The discount rate was changed from 7.0% to 7.5%.
- Employer contributions None

Data Sources

Towers Perrin used asset data supplied by the Company. The Company furnished the claims cost data, as well as the accrued postretirement benefits cost as of December 31, 1994. Data was reviewed for reasonableness and consistency, but no audit was performed. We are aware of no errors or omissions in the data that would have a significant effect on the results of our calculation. The voluntary retirement program was recognized by assuming that 60% of employees between the ages of 55 and 59, and 95% of employees age 60 and over accepted the program.

Employee Data

The company supplied a census of all employees as of July 1, 1994 for the 1995 valuation and as of July 1, 1993 for the 1994 valuation. Numbers as of January 1, 1995 reflect the voluntary retirement program.

	January 1, 1995	January 1, 1994
Active Employees		
Number:		
▶ Fully eligible for benefits	401	865
▶ Other	6,737	7,022
▶ Total	7,138	7,887
Average age	43.7	44.0
Average past service	17.9	17.8
Average future service:		
▶ To full eligibility age	11.7	12.1
▶ To expected retirement	19.1	18.6
Average pay	\$ 48,210	\$ 46,572
Total valuation pay (\$000)	344,119	367,312
Total estimated payroll (\$000)	390,000	415,000

Retired Employees

Retired employees and surviving spouses:

▶ Number:		
- Under age 65	824	256
- At and over age 65	1,868	1,871
- Total	2,692	2,127
▶ Average age	73.0	73.7
Dependents:		
▶ Number:		
- Under age 65	905	444
- At and over age 65	1,215	1,217
- Total	2,120	1,661
▶ Average age	66.8	69.8

Plan Provisions

Medical Benefits

Eligibility	Normal or early retirement.
Dependent eligibility	Spouse and unmarried children under age 19 or full-time student under age 23.
Survivor eligibility	Eligibility continues beyond death of retiree or active employee eligible to retire with payment of full cost required.
Postretirement contributions	None.
Pre-65 benefits	Basic plus major medical; \$150 deductible per individual with a maximum of two deductibles per family (\$300); \$2,500 per person per year out-of-pocket limit; lifetime maximum of \$1,000,000 per person.
Post-65 benefits	Same plan as pre-65 with basic medical changed to Medicare fill-in and major medical changed to retiree major medical plan. Lifetime maximum on major medical of \$250,000 per person.
Medicare coordination	Benefit reduced by Medicare benefit for major medical.
Medicare fill-in benefits	Medicare Part "A": 100% for Part "A" deductible and co-payments (also 30 days of hospital coverage after Medicare). Medicare Part "B": 80% for Part "B" deductible and the 20% employee coinsurance.
Prescription drug	Mail order or Card Plan with individual paying \$7 per prescription for generic drugs (adjustment for brand name drugs).
Defined dollar caps	For employees retiring on or after April 1, 1993, the Company will contribute up to \$4,200 per individual (\$8,400 per couple) annually toward payment of the cost of medical insurance for retirees and their spouses under age 65 and up to \$1,600 per individual (\$3,200 per couple) for retirees age 65 or over. Actual cap may be higher because the individual's contribution from April 1 until March 31 will be based on the actual cost for the prior year. Pre-1993 retirees are grandfathered under the prior uncapped plan.

**Life Insurance
Benefits**

Eligibility Normal or early retirement.

Postretirement
contributions None.

Benefits Management: 2 times salary rounded up to next \$1,000 with maximum of \$900,000. Coverage reduces 12.5% annually beginning at age 65, down to 25% of pre-age 65 coverage.
Union: 2 times pay up to age 65 reducing in 6 level steps to \$7,500 at age 70 (minimum benefit \$10,000 for former Scranton employees).

Actuarial Certification

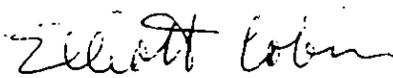
This valuation has been conducted in accordance with generally accepted actuarial principles and practices.

The actuarial assumptions employed in the development of FAS 106 cost have been selected by the plan sponsor, with the concurrence of Towers Perrin. Statement No. 106 of the Financial Accounting Standards Board requires that each significant assumption "individually represents the best estimate of a particular future event."

The actuarial assumptions and methods employed in the development of the contribution limits have been selected by Towers Perrin, with the concurrence of the plan sponsor. The Internal Revenue Code requires the use of reasonable assumptions.



Clyde D. Beers, FSA



Elliott Cobin, ASA, MAAA

Towers Perrin

December 1994

OFFICE OF TRIAL STAFF

DOCKETED
JUN 13 1995

CROSS-EXAMINATION
EXHIBIT NO. 2

3/31/95 Hbg-rk

**DOCUMENT
FOLDER**

DATE: MARCH 21, 1995

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JUN 01 1995

PUBLIC UTILITY COMMISSION
SECRETARY BUREAU

PA PUBLIC UTILITY COMMISSION
vs.
PENNSYLVANIA POWER & LIGHT COMPANY
DOCKET NO: R-00943271

1

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RESOURCE PLANNING REPORT

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OFFICE OF PUBLIC STAFF

MAY 1994

While moving ahead with the regulatory approval process that would allow gas co-firing, PP&L is also working toward completion of technical and economic analyses related to gas supply and equipment for the conversion. These activities are proceeding such that the conversion of Unit 3 is expected to be complete in March 1996, and Unit 4 in December 1996. The LCP reflects this schedule of conversion.

CODE PROVISIONS The Public Utility Code contains two sections specifically addressing retirement of electric generating units. Section 521 (66 Pa.C.S. §521) requires a utility to obtain Commission approval before retiring a unit and empowers the Commission to require continued operation, if cost effective. Section 525 (66 Pa.C.S. §525) provides that the Commission may prohibit retirement of a unit if it determines that sale of the unit or the power from it would be cost effective for both the selling and buying utilities. Because current studies indicate continued operation of its fossil and hydro units is cost-effective, PP&L does not anticipate any major generating unit retirements during the 20 year planning period. Because the Company does not plan to retire any units, the Code sections summarized above are not applicable to its planning and/or operations over the next 20 years.

TRANSMISSION & DISTRIBUTION (T&D) SYSTEM IMPROVEMENTS - An important part of PP&L's planning process is providing a T&D system that cost effectively meets customers future needs for electricity. T&D planning is based on a set of fundamental planning guidelines known as Reliability Principles and Practices. These principles are intended to encourage imaginative solutions to planning problems while assuring a degree of uniformity in planning decisions and providing a balance between cost of service and reliability.

**Pennsylvania Power & Light Company
Response to Interrogatories
of the Office of Trial Staff
Dated February 1, 1995
Docket No. R-00943271**

Q. OTS-RB-43. Refer to Exhibit DAK-4.

Parts (a) and (b) below refer to the generating units for which service lives have been shortened.

- a) Provide a recalculation of annual depreciation expense with the previous longer life span estimates. Supply supporting calculations.
- b) Supply revised average service lives, annual depreciation rate and depreciation rate amounts, based on whole life and remaining life methods respectively.

- A. OTS-RB-43.
- a) Attachment 1 provides the annual depreciation expense calculated for the test year for generating units by account for which the service life has been shortened. These calculations are based on the previous longer life spans. Attachment 2 provides detailed calculations to support this data.
 - b) For these generating units the average service life is provided in Attachment 1. Attachments 2 and 3 include the annual depreciation rate and depreciation rate amount on a remaining life and whole life basis, respectively.

Because Attachments 2 and 3 are voluminous, copies are being provided only to the Office of Trial Staff. Copies will be provided to other parties upon request.

Pennsylvania Power & Light Company

	<u>Annual Depreciation Expense</u>	<u>Average Service Life (WL)</u>	<u>Annual Depreciation Rate (WL)</u>	<u>Average Service Life (RL)</u>	<u>Annual Depreciation Rate (RL)</u>
Sunbury	10,158,354	22.71	4.40%	26.38	3.79%
Martins Creek 1 & 2	6,207,917	25.79	3.88%	28.07	3.56%
Holtwood	1,700,866	25.99	3.85%	37.32	2.68%

D. S. Hoch
J. M. Kleha

**Pennsylvania Power & Light Company
Response to Interrogatories
of the Office of Trial Staff
Dated February 1, 1995
Docket No. R-00943271**

- Q. OTS-RB-48. Provide documentation of the effect on this base rate case if the levelized depreciation expense of the sinking fund is denied. (i.e. changes to revenues, expenses, and rate base)
- A. OTS-RB-48. See the response to Questions 5, 6 and 7 of Interrogatories of the Office of Consumer Advocate, Set III, Dated January 30, 1995. (4, 5 + 6)

**Pennsylvania Power & Light Company
Response to Interrogatories of the
Office of Consumer Advocate, Set III
Dated January 30, 1995
Docket No. R-00943271**

Q. 4. If the Pennsylvania PUC rejects PP&L's request for using levelized depreciation rather than the modified sinking fund, and requires continued use of the modified sinking fund, please identify the difference in test year depreciation expense between that to be booked under the modified sinking fund and the levelized amount requested in this filing.

A. 4. Levelized Susquehanna depreciation expense	\$172,729,583
Present modified sinking fund depreciation expense	<u>142,341,509</u>
Difference	<u>\$30,388,074</u>

D. S. Hoch

**Pennsylvania Power & Light Company
Response to Interrogatories of the
Office of Consumer Advocate, Set III
Dated January 30, 1995
Docket No. R-00943271**

- Q. 5. If the Pennsylvania PUC were to reject PP&L's request for levelizing depreciation on pre-1989 Susquehanna Units 1 and 2 investment, and continued use of the modified sinking fund, would test year rate base be any different? If so, by how much?**
- A. 5. There would be no difference.**

**Pennsylvania Power & Light Company
Response to Interrogatories
of the Office of Trial Staff
Dated January 13, 1995
Docket No. R-00943271**

Q. OTS-RB-22D Refer to Statement No. 4, pages 13-18.

- a) Provide a detailed schedule depicting the calculations of the \$172,729,583 of levelized annual depreciation.
- b) Provide a detailed schedule depicting the annual depreciation expense differences between the modified sinking fund method of depreciation and the straight line depreciation method for the rate base accounts for the time period proposed.

A. OTS-RB-22D

- a. Attachment 1 provides the amount of the current sinking fund depreciation remaining for the period 1995 through 1998. The amount for 1995 has been pro-rated for the last three months of the year. The total amount remaining in the current sinking fund is proposed to be levelized over the remaining 39-month period.
- b. Attachment 2 provides the annual depreciation expense under the current sinking fund, the proposed annual levelized amount, and the difference between the amounts.

Pennsylvania Power & Light Company

Modified Sinking Fund Depreciation on Utility Plant in Account 101

	Depreciation Expense <u>Mod S/F Basis</u>	<u>SFAS 92</u>	Total Depreciation Expense	Remaining Depreciation Expense
1995	121,588,060	19,728,168	141,316,228	35,329,057
1996	136,647,289	19,728,168	156,375,457	156,375,457
1997	153,571,851	19,728,168	173,300,019	173,300,019
1998	172,592,809	19,728,168	192,320,977	<u>192,320,977</u>
			Total	557,325,510

Depreciation on Utility Plant in Account 182.34

	Amortization Expense <u>Mod S/F Basis</u>	<u>SFAS 92</u>	Total Amortization Expense	Remaining Amortization Expense
1995	876,013	149,268	1,025,281	256,320
1996	985,515	149,268	1,134,783	1,134,783
1997	1,108,704	149,268	1,257,972	1,257,972
1998	1,247,292	149,268	1,396,560	<u>1,396,560</u>
			Total	4,045,635

Remaining Modified Sinking Fund 561,371,145

Monthly Levelized Depreciation 14,394,132

Annual Levelized Depreciation 172,729,583

Pennsylvania Power & Light Company

Modified Sinking Fund Vs. Levelized Depreciation

	<u>Mod S/F</u>	<u>Levelized</u>	<u>Difference</u>
1995	35,585,377	43,182,396	(7,597,019)
1996	157,510,240	172,729,583	(15,219,343)
1997	174,557,991	172,729,583	1,828,408
1998	<u>193,717,537</u>	<u>172,729,583</u>	<u>20,987,954</u>
	561,371,145	561,371,145	0

**Pennsylvania Power & Light Company
Response to Interrogatories
of the Office of Trial Staff
Dated January 13, 1995
Docket No. R-00943271**

- Q. OTS-RB-19D**
- a) Please explain the basis for, and provide all supporting documentation for, the net salvage estimate for the Historic and Future test year.
 - b) Provide a detailed schedule, by month, listing the net salvage calculations (i.e. property value less cost of removal) from the last base rate case through the present.
 - c) Provide the Company's definition of cost of removal and salvage value.
- A. OTS-RB-19D**
- a. Removal charges and salvage credits are recorded as negative net salvage for the calendar year and amortized over the next five years. The annual amortization is divided equally over the twelve calendar months. The amount included in Historic Test Year represents the last three months of negative net salvage amortization from 1993 and the first nine months from 1994. The amount included in Future Test Year represents the amortization of negative net salvage for the five-year period from October 1, 1990 to September 30, 1995.
 - b. Attachment 1 provides a monthly listing of the cost of removal and salvage from April, 1985 to 1994.
 - c. The Company defines cost of removal as the cost of demolishing, dismantling, tearing down or otherwise removing electric plant, including the cost of transportation and incidental handling.

Salvage value is defined as the amount received for property retired, less expenses incurred in connection with the sale or in preparing property for sale; or, if retained, the amount at which the material recoverable is charged to materials and supplies, or the appropriate account.

Pennsylvania Power & Light Company

Negative Net Salvage Calculations

	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>
<u>Removal</u>										
Jan		746,867.35	897,190.94	607,757.30	767,148.63	1,433,408.42	1,085,087.53	1,331,337.12	1,018,501.88	1,227,964.39
Feb		395,864.56	877,071.28	831,518.45	876,968.67	1,031,155.87	1,663,646.55	2,212,842.41	1,523,350.47	1,956,745.11
Mar		728,128.96	935,449.11	1,272,139.12	1,314,966.03	2,563,534.84	752,120.16	2,756,706.56	1,520,134.75	1,984,183.56
Apr	687,391.00	913,663.54	733,644.09	1,454,857.34	1,102,668.18	1,237,353.62	2,057,255.63	3,173,959.07	1,623,840.92	2,531,196.89
May	1,132,331.96	1,085,755.10	1,017,312.44	1,152,797.44	1,094,742.12	879,227.63	987,022.28	2,108,094.76	1,877,670.39	3,161,426.76
Jun	548,291.94	1,379,633.82	1,047,587.14	992,886.61	1,066,358.12	1,417,759.16	1,751,586.32	2,591,244.74	2,413,302.33	1,967,006.40
Jul	765,205.34	1,491,373.76	1,050,856.82	1,494,063.68	1,630,832.53	948,824.05	4,179,582.01	1,735,347.36	3,117,304.04	1,508,766.05
Aug	664,452.38	789,687.15	946,767.85	1,037,909.54	1,027,610.17	1,140,879.53	2,574,178.08	1,408,331.53	3,894,814.83	2,044,784.60
Sep	814,322.86	1,446,594.90	795,116.22	1,182,768.01	504,546.01	1,193,269.88	758,601.95	1,691,561.68	1,867,196.85	2,982,932.57
Oct	935,890.17	1,132,802.62	1,504,372.03	1,744,913.63	1,425,950.30	2,396,180.60	1,628,180.74	2,133,013.62	2,853,898.82	2,193,204.62
Nov	470,695.85	1,077,348.41	994,577.21	1,486,265.24	1,795,406.73	1,704,143.04	1,652,653.72	1,090,170.28	2,018,046.62	1,987,533.11
Dec	<u>664,639.84</u>	<u>730,731.33</u>	<u>924,795.19</u>	<u>1,039,136.30</u>	<u>1,581,576.98</u>	<u>2,026,462.38</u>	<u>3,749,258.12</u>	<u>2,371,387.19</u>	<u>2,161,244.92</u>	<u>1,680,612.84</u>
Total	6,683,221.34	11,918,451.50	11,724,740.32	14,297,012.66	14,188,774.47	17,972,199.02	22,839,173.09	24,603,996.32	25,889,306.82	25,226,356.90
<u>Salvage</u>										
Jan		(175,139.30)	(167,377.41)	(186,204.33)	(273,080.56)	(230,111.77)	(308,175.62)	(19,832.19)	(110,529.76)	(179,239.96)
Feb		259,205.75	(166,136.91)	(339,097.84)	(299,617.92)	(301,071.44)	(237,824.67)	(264,804.91)	(234,154.00)	(144,413.24)
Mar		(197,991.15)	(270,895.20)	(458,806.67)	(477,883.12)	(435,113.83)	(120,549.17)	(328,345.07)	(824,528.85)	(340,859.98)
Apr	(477,272.19)	(227,498.34)	(219,845.38)	(571,162.08)	(490,125.09)	(197,788.95)	(187,850.00)	(325,013.93)	(211,031.80)	(309,320.22)
May	(436,771.33)	(258,982.85)	(212,495.73)	(281,439.10)	(383,070.92)	(129,190.60)	(49,436.31)	(206,714.21)	(177,370.45)	(338,491.62)
Jun	(389,299.74)	(229,320.78)	(291,873.24)	(314,683.27)	(373,123.13)	(226,267.84)	(115,606.66)	(312,380.96)	(839,186.49)	(497,804.79)
Jul	(300,804.80)	(198,878.45)	(215,755.51)	(245,559.39)	(265,670.86)	(305,479.73)	(181,056.43)	(175,131.08)	(165,370.57)	(152,732.07)
Aug	(534,717.69)	(93,542.94)	(225,225.82)	(304,406.96)	(220,400.38)	(189,984.50)	(264,035.52)	(221,328.56)	(286,024.23)	(216,898.84)
Sep	(453,495.11)	(207,024.75)	(212,962.33)	(272,015.92)	(267,440.56)	(289,772.49)	(244,891.53)	(287,492.71)	(486,804.83)	(316,485.83)
Oct	(372,530.68)	(509,281.68)	(202,175.65)	(372,954.17)	(270,751.30)	71,093.33	(220,292.22)	(252,766.13)	(99,000.96)	(267,275.16)
Nov	(230,603.88)	(75,202.96)	(184,566.66)	(864,439.50)	(190,794.47)	(210,237.37)	(153,762.63)	(146,952.80)	(238,291.51)	(262,623.79)
Dec	<u>(23,147.32)</u>	<u>(108,706.24)</u>	<u>(124,753.59)</u>	<u>(16,642.29)</u>	<u>(125,491.26)</u>	<u>(121,857.74)</u>	<u>(159,337.20)</u>	<u>(105,847.17)</u>	<u>(112,512.90)</u>	<u>(196,531.90)</u>
Total	(3,218,642.74)	(2,022,363.69)	(2,494,063.43)	(4,227,411.52)	(3,637,449.57)	(2,565,782.93)	(2,242,817.96)	(2,646,609.72)	(3,784,806.35)	(3,222,677.40)

Pennsylvania Power & Light Company

Negative Net Salvage Calculations

	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>	<u>1989</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>	<u>1993</u>	<u>1994</u>
<u>Net</u>										
Jan		571,728.05	729,813.53	421,552.97	494,068.07	1,203,296.65	776,911.91	1,311,504.93	907,972.12	1,048,724.43
Feb		655,070.31	710,934.37	492,420.61	577,350.75	730,084.43	1,425,821.88	1,948,037.50	1,289,196.47	1,812,331.87
Mar		530,137.81	664,553.91	813,332.45	837,082.91	2,128,421.01	631,570.99	2,428,361.49	695,605.90	1,643,323.58
Apr	210,118.81	686,165.20	513,798.71	883,695.26	612,543.09	1,039,564.67	1,869,405.63	2,848,945.14	1,412,809.12	2,221,876.67
May	695,560.63	826,772.25	804,816.71	871,358.34	711,671.20	750,037.03	937,585.97	1,901,380.55	1,700,299.94	2,822,935.14
Jun	158,992.20	1,150,313.04	755,713.90	678,203.34	693,234.99	1,191,491.32	1,635,979.66	2,278,863.78	1,574,115.84	1,469,201.61
Jul	464,400.54	1,292,495.31	835,101.31	1,248,504.29	1,365,161.67	643,344.32	3,998,525.58	1,560,216.28	2,951,933.47	1,356,033.98
Aug	129,734.69	696,144.21	721,542.03	733,502.58	807,209.79	950,895.03	2,310,142.56	1,187,002.97	3,608,790.60	1,827,885.76
Sep	360,827.75	1,239,570.15	582,153.89	910,752.09	237,105.45	903,497.39	513,710.42	1,404,068.97	1,380,392.02	2,666,446.74
Oct	563,359.49	623,520.94	1,302,196.38	1,371,959.46	1,155,199.00	2,467,273.93	1,407,888.52	1,880,247.49	2,754,897.86	1,925,929.46
Nov	240,091.97	1,002,145.45	810,010.55	621,825.74	1,604,612.26	1,493,905.67	1,498,891.09	943,217.48	1,779,755.11	1,724,909.32
Dec	<u>641,492.52</u>	<u>622,025.09</u>	<u>800,041.60</u>	<u>1,022,494.01</u>	<u>1,456,085.72</u>	<u>1,904,604.64</u>	<u>3,589,920.92</u>	<u>2,265,540.02</u>	<u>2,048,732.02</u>	<u>1,484,080.94</u>
Total	3,464,578.60	9,896,087.81	9,230,676.89	10,069,601.14	10,551,324.90	15,406,416.09	20,596,355.13	21,957,386.60	22,104,500.47	22,003,679.50

PA PUBLIC UTILITY COMMISSION
V. PENNSYLVANIA POWER & LIGHT
COMPANY
DOCKET NO. R-00943271

OCA CROSS EXAMINATION EXH. NO. 1

DATE ENTERED: 3-21-95

Hby WSH

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Pennsylvania Power & Light Company
Response to Interrogatories of
the Office Consumer Advocate, Set V
Dated February 6, 1995

Docket No. R-00943271

- Q.20. Mr. Moul has employed the comparable earnings method:
- a. Is this technique specifically designed to produce an estimate of PP&L's market-determined cost of common equity? Please explain.
 - b. Is this technique intended to produce an estimate of the rate of return which investors require to purchase or hold common stock? Please explain.
- A.20.a. The comparable earnings method as applied by Mr. Moul is designed to conform with the Bluefield and Hope standards of a fair rate of return, i.e., a return which is commensurate with the return on investments in other enterprises having corresponding risks and uncertainties. The Bluefield and Hope standards do not cite to a specific market-determined cost of equity.
- b. The comparable earnings method involves the determination of a fair rate of return developed by reference to other enterprises having corresponding risks and uncertainties. To the extent that the rates of return on book value for the non-regulated firms influence investors' selection decisions, then this approach does indicate the return which makes a particular firm's stock attractive to investors.

PA PUBLIC UTILITY COMMISSION
V. PENNSYLVANIA POWER & LIGHT
COMPANY
DOCKET NO. R-00943271

OCA CROSS EXAMINATION EXH. NO. 2

DATE ENTERED: 3-21-95

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**Pennsylvania Power & Light Company
Response to Interrogatories
of the Office of Consumer Advocate, Set IV
Dated February 1, 1995
Docket No. R-00943271**

Q. 66. Please identify the average annual salary increases granted union and, separately, non-union employees in each of the last five years.

A. 66. The average annual salary increases which were granted in the last five years are:

	<u>Union</u>	<u>Non-Union</u>
1994	4.00%	4.00%
1993	4.25	4.50
1992	4.50	5.00
1991	4.50	5.25
1990	5.00	4.50

**Pennsylvania Power & Light Company
Response to Interrogatories
of the Office of Consumer Advocate, Set IV
Dated February 1, 1995
Docket No. R-00943271**

Q. 67. Please identify the future percentage wage increases provided for in any existing union contracts.

A. 67. The following are the future wage increases which are provided for in the existing union contract.

1995	3.00%
1996	3.00%

Note: The response to Question OTS-RE-5D of Interrogatories of the Office of Trial Staff Dated January 13, 1995 inadvertently identified the wage increases for both union and non-union employees for the Future Test Year as 3.25%. The correct response, for both union and non-union employees, for the Future Test Year is 3.00%.

PA PUBLIC UTILITY COMMISSION
V. PENNSYLVANIA POWER & LIGHT
COMPANY
DOCKET NO. R-00943271

OCA CROSS EXAMINATION EXH. NO. ~~2~~ 3

DATE ENTERED: 3-21-95

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Pennsylvania Power & Light Company
Response to Interrogatories
of the Office of Consumer Advocate, Set IV
Dated February 1, 1995
Docket No. R-00943271

Q. 105. Please provide any projections of pension contributions for the next several years, if available. Identify any amounts included related to the VERP.

A. 105. The projection of pension contributions for the next five years is as follows:

<u>Plan Year</u> <u>Beginning</u>	<u>Amount</u>
7/1/94	\$ 0
7/1/95	0
7/1/96	25,950,000
7/1/97	26,410,000
7/1/98	24,090,000

Pension contributions were projected to begin in 1998. The VERP increased the actuarial accrued liability by approximately two years of normal cost. Thus, contributions are expected to be made starting in 1996.

PA PUBLIC UTILITY COMMISSION
V. PENNSYLVANIA POWER & LIGHT
COMPANY
DOCKET NO. R-00943271

OCA CROSS EXAMINATION EXH. NO. 4

DATE ENTERED: 3/21/95

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Pennsylvania Power & Light Company
Response to Interrogatories of the
Office of Consumer Advocate, Set III
Dated January 30, 1995
Docket No. R-00943271

- Q. 8. Please refer to page 15, line 12. Has PP&L performed life studies on the general plant accounts that the Company is now proposing to amortize? If so, please provide these studies.
- A. 8. As part of the current life study, an actuarial analysis of life characteristics for the General Plant accounts proposed to be amortized was performed. The CADLAS program available from the Federal Energy Regulatory Commission was used. Resulting life tables and curve fits are provided in Attachment 1.

Because this document is voluminous, copies are being provided only to the Office of Consumer Advocate. Copies will be provided to other parties upon request.

FEDERAL ENERGY REGULATORY COMMISSION
OBSERVED LIFE TABLE # 4
(EXPERIENCE ANALYSIS)

COMPANIES -

14715 PENNSYLVANIA POWER & LIGHT CO (PA)

ACCOUNT - 912 391.2 -- FURNITURE

PLACEMENT YEARS 1886 - 1991
ANALYSIS IN DOLLARSEXPERIENCE YEARS 1972 - 1991
AVERAGE AGE OF RETIREMENTS 30.0

AGE AT BEGIN. OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS* DURING AGE INTERVAL	RETIRE- MENT RATIOS	PCT SURV AT BEGINNING OF AGE INTERVAL
0.0	12,442,928.	245.	0.0000	100.00
0.5	11,832,530.	739.	0.0001	100.00
1.5	11,054,492.	18,015.	0.0016	99.99
2.5	10,605,344.	27,560.	0.0026	99.83
3.5	10,298,425.	13,356.	0.0013	99.57
4.5	9,805,136.	12,836.	0.0013	99.44
5.5	9,436,230.	14,482.	0.0015	99.31
6.5	8,855,944.	17,190.	0.0019	99.16
7.5	8,502,117.	39,766.	0.0047	98.97
8.5	6,682,450.	22,037.	0.0033	98.50
9.5	6,049,163.	25,833.	0.0043	98.18
10.5	5,550,153.	23,105.	0.0042	97.76
11.5	4,948,928.	28,859.	0.0058	97.35
12.5	4,332,677.	27,091.	0.0063	96.78
13.5	4,135,131.	16,891.	0.0041	96.18
14.5	4,132,310.	35,859.	0.0087	95.79
15.5	3,139,144.	41,067.	0.0131	94.95
16.5	2,679,632.	31,939.	0.0119	93.71
17.5	2,580,317.	22,483.	0.0087	92.60
18.5	1,470,266.	37,564.	0.0255	91.79
19.5	1,223,373.	12,882.	0.0105	89.44
20.5	1,142,488.	8,102.	0.0071	88.50
21.5	987,486.	29,664.	0.0300	87.87
22.5	934,611.	15,517.	0.0166	85.23
23.5	900,854.	14,372.	0.0160	83.82
24.5	876,138.	18,169.	0.0207	82.48
25.5	866,679.	13,219.	0.0153	80.77
26.5	833,758.	28,950.	0.0347	79.54
27.5	792,890.	19,794.	0.0250	76.78
28.5	758,959.	9,488.	0.0125	74.86
29.5	709,513.	11,273.	0.0159	73.92
30.5	687,775.	13,773.	0.0200	72.75
31.5	675,174.	16,014.	0.0237	71.29
32.5	660,147.	8,293.	0.0126	69.60
33.5	634,236.	19,986.	0.0315	68.73
34.5	534,786.	6,454.	0.0121	66.56

35.5	491,640.	11,235.	0.0229	65.76
36.5	442,381.	8,907.	0.0201	64.26

AGE AT IN. OF PERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS* DURING AGE INTERVAL	RETIRE- MENT RATIOS	PCT SURV AT BEGINNING OF AGE INTERVAL
37.5	351,353.	6,316.	0.0180	62.96
38.5	298,347.	10,509.	0.0352	61.83
39.5	259,361.	12,266.	0.0473	59.65
40.5	184,377.	5,863.	0.0318	56.83
41.5	214,171.	6,903.	0.0322	55.02
42.5	244,197.	11,278.	0.0462	53.25
43.5	343,976.	11,881.	0.0345	50.79
44.5	344,455.	18,191.	0.0528	49.04
45.5	381,407.	104,544.	0.2741	46.45
46.5	303,545.	61,793.	0.2036	33.72
47.5	273,518.	103,384.	0.3780	26.85
48.5	187,639.	24,352.	0.1298	16.70
49.5	171,031.	59,639.	0.3487	14.54
50.5	113,142.	25,329.	0.2239	9.47
51.5	84,588.	26,199.	0.3097	7.35
52.5	56,447.	12,740.	0.2257	5.07
53.5	41,952.	7,329.	0.1747	3.93
54.5	25,982.	5,244.	0.2018	3.24
55.5	12,302.	1,289.	0.1048	2.59
56.5	9,439.	1,974.	0.2091	2.32
57.5	5,586.	5.	0.0009	1.83
58.5	3,375.	104.	0.0308	1.83
59.5	3,251.	0.	0.0000	1.77
60.5	208.	127.	0.6106	1.77
61.5	81.	0.	0.0000	0.69
62.5	81.	81.	1.0000	0.69
63.5				0.00
TOTALS	156,600,016.	1,240,349.		

* THE RETIREMENTS PRECEDED BY AN "X" ARE INCLUDED IN THIS COLUMN:

- X (1) REGULAR
- (2) REIMBURSED
- X (3) SALES
- (4) OUTLIERS
- X (5) FOR REBUILDING

SURVIVOR CURVE INDICATIONS

CEMENT YEARS 1886 - 1991

EXPERIENCE YEARS 1972 - 1991

CURVE INDICATIONS USING ALL SIGNIFICANT DATA

AGE RANGE: 0.0 - 63.5

% SURVIVING RANGE: 100.00 - 0.00

CURVE INDICATION	RESIDUAL MEASURE
S1- 38.8	7.39
S2- 38.7	6.41
S3- 38.6	8.13
R1- 39.0	9.70
R2- 38.7	5.49
R3- 38.6	5.87
L2- 39.6	9.41
L3- 38.9	8.81
L4- 38.6	10.22

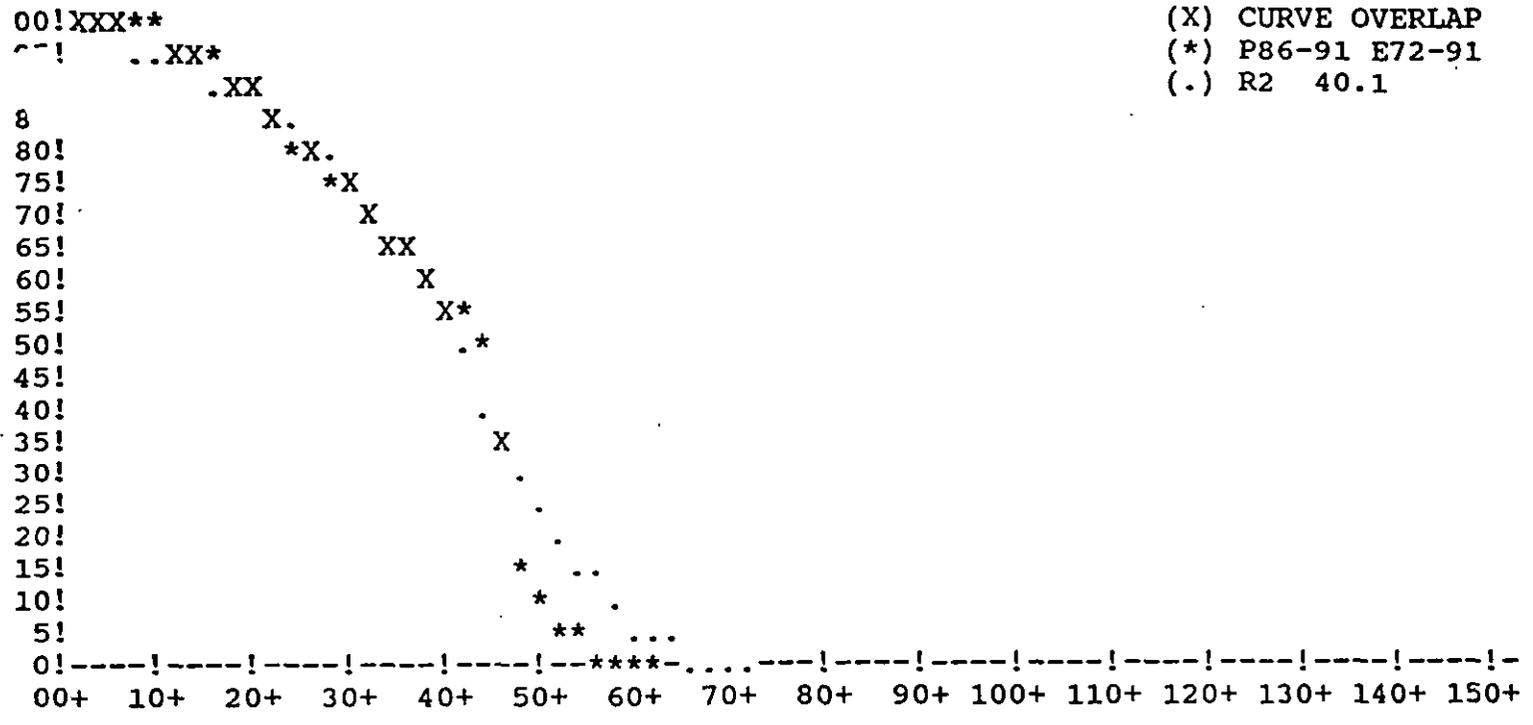
CURVE INDICATIONS USING DATA FROM 85% TO 15% SURVIVING

AGE RANGE: 23.5 - 48.5

% SURVIVING RANGE: 83.82 - 16.70

CURVE INDICATION	RESIDUAL MEASURE
S0- 43.6	6.84
S1- 41.8	5.30
S2- 40.6	6.44
R1- 41.8	6.35
R2- 40.1	4.68
R3- 39.4	7.69
L1- 46.5	7.02
L2- 43.9	5.96
L3- 41.8	8.39

(X) CURVE OVERLAP
(*) P86-91 E72-91
(.) R2 40.1



FEDERAL ENERGY REGULATORY COMMISSION
OBSERVED LIFE TABLE # 3
(PLACEMENT ANALYSIS)

COMPANIES -
14715 PENNSYLVANIA POWER & LIGHT CO (PA)
ACCOUNT - 914 391.4 -- MECHANICAL EQUIPMENT

PLACEMENT YEARS 1977 - 1991
ANALYSIS IN DOLLARS

EXPERIENCE YEARS 1977 - 1992
AVERAGE AGE OF RETIREMENTS 7.7

AGE AT BEGIN. OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS* DURING AGE INTERVAL	RETIRE- MENT RATIOS	PCT SURV AT BEGINNING OF AGE INTERVAL
0.0	1,712,866.	513.	0.0003	100.00
0.5	1,712,353.	2,522.	0.0015	99.97
1.5	1,604,549.	25,940.	0.0162	99.82
2.5	1,499,785.	14,203.	0.0095	98.21
3.5	1,409,513.	13,776.	0.0098	97.28
4.5	1,286,369.	13,640.	0.0106	96.33
5.5	1,196,810.	19,984.	0.0167	95.31
6.5	1,059,380.	41,294.	0.0390	93.72
7.5	889,235.	30,215.	0.0340	90.06
8.5	760,186.	30,392.	0.0400	87.00
9.5	611,117.	19,975.	0.0327	83.52
10.5	481,281.	25,730.	0.0535	80.79
11.5	334,529.	13,619.	0.0407	76.47
12.5	252,859.	11,460.	0.0453	73.36
13.5	144,049.	6,742.	0.0468	70.04
14.5	52,180.	5,430.	0.1041	66.76
15.5				59.81
TOTALS	15,007,061.	275,435.		

* THE RETIREMENTS PRECEDED BY AN "X" ARE INCLUDED IN THIS COLUMN:

X (1) REGULAR
X (2) REIMBURSED
X (3) SALES
X (4) OUTLIERS
X (5) FOR REBUILDING

SURVIVOR CURVE INDICATIONS

CEMENT YEARS 1977 - 1991

EXPERIENCE YEARS 1977 - 1992

CURVE INDICATIONS USING ALL SIGNIFICANT DATA

AGE RANGE: 0.0 - 15.5 % SURVIVING RANGE: 100.00 - 59.81

CURVE INDICATION RESIDUAL MEASURE

S0- 19.6	1.60
S1- 16.8	1.81
R1- 19.8	3.18
R2- 16.2	1.18
R3- 14.6	5.15
L0- 25.7	3.18
L1- 20.3	0.79
L2- 17.2	3.35

CURVE INDICATIONS USING DATA FROM 85% TO 15% SURVIVING

AGE RANGE: 9.5 - 15.5 % SURVIVING RANGE: 83.52 - 59.81

CURVE INDICATION RESIDUAL MEASURE

S0- 19.1	1.27
S1- 17.1	1.69
R1- 18.2	1.68
R2- 16.1	1.70
L0- 23.6	2.49
L1- 20.2	1.01
L2- 17.9	3.12

FEDERAL ENERGY REGULATORY COMMISSION
OBSERVED LIFE TABLE # 1
(FULL BAND ANALYSIS)

COMPANIES - 14715 PENNSYLVANIA POWER & LIGHT CO (PA)

ACCOUNT - 916 391.6 -- COMPUTER EQUIPMENT

PLACEMENT YEARS 1983 - 1992
ANALYSIS IN DOLLARS

EXPERIENCE YEARS 1983 - 1992
AVERAGE AGE OF RETIREMENTS 6.5

AGE AT BEGIN. OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS* DURING AGE INTERVAL	RETIRE- MENT RATIOS	PCT SURV AT BEGINNING OF AGE INTERVAL
0.0	2,371,002.	0.	0.0000	100.00
0.5	2,355,047.	0.	0.0000	100.00
1.5	2,244,782.	0.	0.0000	100.00
2.5	2,121,165.	507.	0.0002	100.00
3.5	2,080,733.	46,410.	0.0223	99.98
4.5	1,941,358.	0.	0.0000	97.75
5.5	1,868,614.	0.	0.0000	97.75
6.5	1,861,599.	70,615.	0.0379	97.75
7.5	1,686,947.	30,766.	0.0182	94.04
8.5	13,333.	13,332.	0.9999	92.32
9.5				0.01
TOTALS	18,544,580.	161,630.		

* THE RETIREMENTS PRECEDED BY AN "X" ARE INCLUDED IN THIS COLUMN:

- X (1) REGULAR
- (2) REIMBURSED
- X (3) SALES
- (4) OUTLIERS
- X (5) FOR REBUILDING

SURVIVOR CURVE INDICATIONS

CEMENT YEARS 1983 - 1992

EXPERIENCE YEARS 1983 - 1992

CURVE INDICATIONS USING ALL SIGNIFICANT DATA

AGE RANGE: 0.0 - 9.5

% SURVIVING RANGE: 100.00 - 0.01

CURVE INDICATION RESIDUAL MEASURE

S6- 8.8 9.49

SQ- 8.5 2.25

R4- 9.1 17.56

R5- 9.0 13.57

L4- 9.4 16.75

L5- 9.0 14.04

CURVE INDICATIONS USING DATA FROM 85% TO 15% SURVIVING

NO FIT PREPARED--LESS THAN 3 POINTS ON CURVE IN FIT RANGE

FEDERAL ENERGY REGULATORY COMMISSION
OBSERVED LIFE TABLE # 4
(EXPERIENCE ANALYSIS)

COMPANIES -

14715 PENNSYLVANIA POWER & LIGHT CO (PA)

ACCOUNT - 393 STORES EQUIPMENT

PLACEMENT YEARS 1904 - 1991
ANALYSIS IN DOLLARS

EXPERIENCE YEARS 1972 - 1991
AVERAGE AGE OF RETIREMENTS 28.0

AGE AT BEGIN. OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS* DURING AGE INTERVAL	RETIRE- MENT RATIOS	PCT SURV AT BEGINNING OF AGE INTERVAL
0.0	1,844,426.	0.	0.0000	100.00
0.5	1,926,520.	0.	0.0000	100.00
1.5	2,005,690.	0.	0.0000	100.00
2.5	2,032,499.	105.	0.0001	100.00
3.5	2,039,656.	1,081.	0.0005	99.99
4.5	1,942,055.	1,078.	0.0006	99.94
5.5	1,954,283.	1,209.	0.0006	99.89
6.5	1,744,625.	1,989.	0.0011	99.82
7.5	1,716,916.	2,378.	0.0014	99.71
8.5	1,553,280.	23,352.	0.0150	99.57
9.5	1,324,371.	11,215.	0.0085	98.08
10.5	1,253,985.	12,784.	0.0102	97.25
11.5	1,232,486.	4,177.	0.0034	96.25
12.5	1,020,043.	22,238.	0.0218	95.93
13.5	893,732.	5,416.	0.0061	93.84
14.5	894,428.	5,862.	0.0066	93.27
15.5	892,607.	6,542.	0.0073	92.66
16.5	612,342.	2,224.	0.0036	91.98
17.5	533,962.	2,415.	0.0045	91.64
18.5	439,983.	1,878.	0.0043	91.23
19.5	303,109.	6,433.	0.0212	90.84
20.5	220,532.	2,633.	0.0119	88.91
21.5	171,785.	2,311.	0.0135	87.85
22.5	134,787.	6,302.	0.0468	86.67
23.5	104,371.	902.	0.0086	82.62
24.5	94,248.	646.	0.0069	81.90
25.5	92,706.	442.	0.0048	81.34
26.5	87,891.	2,912.	0.0331	80.95
27.5	82,562.	4,648.	0.0563	78.27
28.5	75,059.	2,264.	0.0302	73.86
29.5	67,226.	4,003.	0.0595	71.64
30.5	62,275.	15,430.	0.2478	67.37
31.5	48,071.	2,052.	0.0427	50.68
32.5	47,504.	894.	0.0188	48.51
33.5	46,199.	1,021.	0.0221	47.60
34.5	46,241.	611.	0.0132	46.55

35.5	52,398.	4,041.	0.0771	45.93
36.5	46,230.	2,046.	0.0443	42.39

AGE AT IN. OF PERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS* DURING AGE INTERVAL	RETIRE- MENT RATIOS	PCT SURV AT BEGINNING OF AGE INTERVAL
37.5	43,522.	1,652.	0.0380	40.52
38.5	35,593.	7,775.	0.2184	38.98
39.5	27,602.	471.	0.0171	30.46
40.5	34,876.	510.	0.0146	29.94
41.5	28,756.	3,938.	0.1369	29.51
42.5	38,397.	725.	0.0189	25.47
43.5	42,678.	2,177.	0.0510	24.98
44.5	44,002.	2,187.	0.0497	23.71
45.5	62,104.	19,415.	0.3126	22.53
46.5	47,388.	14,526.	0.3065	15.49
47.5	40,597.	4,516.	0.1112	10.74
48.5	36,194.	3,875.	0.1071	9.55
49.5	32,201.	14,811.	0.4600	8.52
50.5	17,189.	5,345.	0.3110	4.60
51.5	11,443.	7,614.	0.6654	3.17
52.5	3,145.	768.	0.2442	1.06
53.5	2,280.	0.	0.0000	0.80
54.5	1,975.	585.	0.2962	0.80
55.5	365.	275.	0.7534	0.56
56.5	90.	0.	0.0000	0.14
57.5	90.	0.	0.0000	0.14
58.5	90.	0.	0.0000	0.14
59.5	67.	0.	0.0000	0.14
60.5	0.	0.	0.0000	0.14
61.5	25.	0.	0.0000	0.14
62.5	25.	0.	0.0000	0.14
63.5	25.	25.	1.0000	0.14
64.5				0.00
TOTALS	30,191,802.	256,724.		

THE RETIREMENTS PRECEDED BY AN "X" ARE INCLUDED IN THIS COLUMN:

- X (1) REGULAR
- (2) REIMBURSED
- X (3) SALES
- (4) OUTLIERS
- X (5) FOR REBUILDING

SURVIVOR CURVE INDICATIONS

CEMENT YEARS 1904 - 1991

EXPERIENCE YEARS 1972 - 1991

CURVE INDICATIONS USING ALL SIGNIFICANT DATA

AGE RANGE: 0.0 - 64.5

% SURVIVING RANGE: 100.00 - 0.00

CURVE INDICATION	RESIDUAL MEASURE
S1- 34.2	4.81
S2- 34.2	2.98
S3- 34.2	5.04
R1- 34.2	8.07
R2- 34.2	3.85
R3- 34.2	4.37
L2- 34.4	6.55
L3- 34.2	4.27
L4- 34.2	6.12

CURVE INDICATIONS USING DATA FROM 85% TO 15% SURVIVING

AGE RANGE: 23.5 - 46.5

% SURVIVING RANGE: 82.62 - 15.49

CURVE INDICATION	RESIDUAL MEASURE
S1- 34.7	5.92
S2- 34.7	4.18
S3- 34.7	6.66
R1- 33.7	7.89
R2- 33.9	5.08
R3- 34.2	6.74
L2- 36.3	6.10
L3- 35.7	3.46
L4- 35.0	8.37

FEDERAL ENERGY REGULATORY COMMISSION
OBSERVED LIFE TABLE # 4
(EXPERIENCE ANALYSIS)

COMPANIES -

14715 PENNSYLVANIA POWER & LIGHT CO (PA)

ACCOUNT - 394 TOOLS, SHOP AND GARAGE EQUIPMENT

PLACEMENT YEARS 1906 - 1991
ANALYSIS IN DOLLARS

EXPERIENCE YEARS 1982 - 1991
AVERAGE AGE OF RETIREMENTS 16.8

AGE AT BEGIN. OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS* DURING AGE INTERVAL	RETIRE- MENT RATIOS	PCT SURV AT BEGINNING OF AGE INTERVAL
0.0	13,864,367.	559.	0.0000	100.00
0.5	12,756,474.	14,843.	0.0012	100.00
1.5	11,766,808.	25,357.	0.0022	99.88
2.5	11,025,536.	15,851.	0.0014	99.66
3.5	10,297,477.	31,053.	0.0030	99.52
4.5	8,468,693.	53,143.	0.0063	99.22
5.5	7,005,013.	68,337.	0.0098	98.60
6.5	6,172,758.	66,148.	0.0107	97.64
7.5	5,605,143.	32,443.	0.0058	96.59
8.5	5,159,559.	76,613.	0.0148	96.03
9.5	4,384,357.	66,236.	0.0151	94.61
10.5	3,981,332.	48,284.	0.0121	93.18
11.5	3,698,515.	61,442.	0.0166	92.05
12.5	3,417,405.	54,540.	0.0160	90.52
13.5	2,783,677.	73,925.	0.0266	89.07
14.5	2,639,597.	109,571.	0.0415	86.71
15.5	2,304,938.	43,102.	0.0187	83.11
16.5	1,733,498.	42,273.	0.0244	81.55
17.5	1,583,744.	56,147.	0.0355	79.56
18.5	1,158,595.	30,304.	0.0262	76.74
19.5	929,209.	36,107.	0.0389	74.74
20.5	800,290.	23,969.	0.0300	71.83
21.5	682,429.	16,696.	0.0245	69.68
22.5	572,598.	12,651.	0.0221	67.98
23.5	490,573.	12,824.	0.0261	66.47
24.5	414,474.	11,251.	0.0271	64.74
25.5	349,117.	26,580.	0.0761	62.98
26.5	311,908.	17,628.	0.0565	58.18
27.5	281,477.	11,253.	0.0400	54.90
28.5	275,769.	5,879.	0.0213	52.70
29.5	262,460.	12,992.	0.0495	51.58
30.5	273,889.	18,491.	0.0675	49.02
31.5	270,732.	14,241.	0.0526	45.72
32.5	273,789.	10,832.	0.0396	43.31
33.5	277,792.	15,351.	0.0553	41.60
34.5	253,006.	20,581.	0.0813	39.30

35.5
36.5

236,674.
205,947.

21,364.
10,775.

0.0903
0.0523

36.10
32.84

AGE AT FIN. OF TERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS* DURING AGE INTERVAL	RETIRE- MENT RATIOS	PCT SURV AT BEGINNING OF AGE INTERVAL
37.5	190,177.	10,207.	0.0537	31.12
38.5	170,365.	6,348.	0.0373	29.45
39.5	151,790.	3,234.	0.0213	28.36
40.5	136,849.	727.	0.0053	27.75
41.5	122,144.	2,271.	0.0186	27.60
42.5	106,045.	4,745.	0.0447	27.09
43.5	86,165.	4,219.	0.0490	25.88
44.5	69,887.	2,557.	0.0366	24.61
45.5	82,093.	5,208.	0.0634	23.71
46.5	73,039.	12,358.	0.1692	22.21
47.5	60,134.	3,299.	0.0549	18.45
48.5	59,174.	3,578.	0.0605	17.44
49.5	58,733.	5,228.	0.0890	16.38
50.5	47,482.	3,121.	0.0657	14.93
51.5	37,456.	3,139.	0.0838	13.94
52.5	37,161.	658.	0.0177	12.78
53.5	28,801.	1,650.	0.0573	12.55
54.5	22,757.	198.	0.0087	11.83
55.5	17,717.	0.	0.0000	11.73
56.5	14,703.	0.	0.0000	11.73
57.5	14,231.	0.	0.0000	11.73
58.5	9,346.	0.	0.0000	11.73
59.5	8,114.	0.	0.0000	11.73
60.5	7,955.	0.	0.0000	11.73
61.5	7,955.	6,941.	0.8725	11.73
62.5	1,014.	0.	0.0000	1.49
63.5	1,014.	0.	0.0000	1.49
64.5	1,014.	0.	0.0000	1.49
65.5	1,014.	0.	0.0000	1.49
66.5	1,014.	0.	0.0000	1.49
67.5	1,014.	0.	0.0000	1.49
68.5	1,014.	0.	0.0000	1.49
69.5				1.49
TOTALS	128,596,990.	1,349,322.		

THE RETIREMENTS PRECEDED BY AN "X" ARE INCLUDED IN THIS COLUMN:

- X (1) REGULAR
- (2) REIMBURSED
- X (3) SALES
- (4) OUTLIERS
- X (5) FOR REBUILDING

SURVIVOR CURVE INDICATIONS

AGE RANGEMENT YEARS 1906 - 1991

EXPERIENCE YEARS 1982 - 1991

CURVE INDICATIONS USING ALL SIGNIFICANT DATA

AGE RANGE: 0.0 - 69.5

% SURVIVING RANGE: 100.00 - 1.49

CURVE INDICATION	RESIDUAL MEASURE
S0- 32.2	4.01
S1- 32.2	6.06
R1- 32.2	5.44
R2- 32.2	7.64
L0- 32.8	4.89
L1- 32.3	2.05
L2- 32.2	4.27

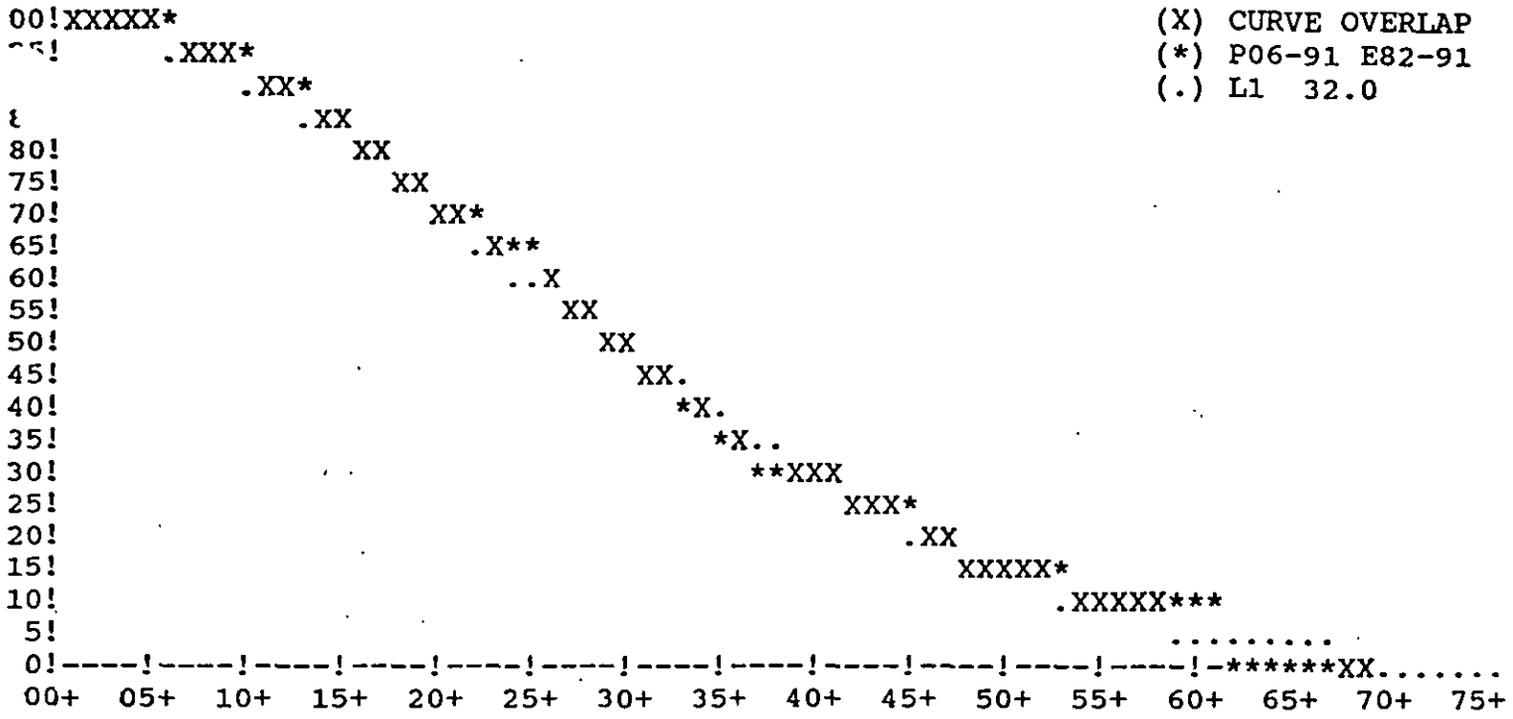
CURVE INDICATIONS USING DATA FROM 85% TO 15% SURVIVING

AGE RANGE: 15.5 - 49.5

% SURVIVING RANGE: 83.11 - 16.38

CURVE INDICATION	RESIDUAL MEASURE
S0- 30.8	2.69
S1- 31.0	6.02
R1- 30.4	4.29
R2- 30.7	8.91
L0- 32.7	4.44
L1- 32.0	1.73
L2- 31.8	4.52

(X) CURVE OVERLAP
(*) P06-91 E82-91
(.) L1 32.0



FEDERAL ENERGY REGULATORY COMMISSION
OBSERVED LIFE TABLE # 1
(PLACEMENT ANALYSIS)

C O R P O R A T I O N S -
14715 PENNSYLVANIA POWER & LIGHT CO (PA)
ACCOUNT - 395 LABORATORY EQUIPMENT

PLACEMENT YEARS 1972 - 1991
ANALYSIS IN DOLLARS

EXPERIENCE YEARS 1972 - 1992
AVERAGE AGE OF RETIREMENTS 13.0

AGE AT BEGIN. OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS* DURING AGE INTERVAL	RETIRE- MENT RATIOS	PCT SURV AT BEGINNING OF AGE INTERVAL
0.0	4,184,210.	0.	0.0000	100.00
0.5	4,184,210.	0.	0.0000	100.00
1.5	4,059,181.	127.	0.0000	100.00
2.5	3,750,843.	0.	0.0000	100.00
3.5	3,567,667.	0.	0.0000	100.00
4.5	3,219,084.	35,712.	0.0111	100.00
5.5	2,947,215.	4,487.	0.0015	98.89
6.5	2,617,228.	14,360.	0.0055	98.74
7.5	2,042,811.	10,683.	0.0052	98.20
8.5	1,413,594.	1,634.	0.0012	97.68
9.5	1,280,390.	4,185.	0.0033	97.57
10.5	1,009,069.	8,039.	0.0080	97.25
11.5	799,984.	61,165.	0.0765	96.48
12.5	661,318.	3,452.	0.0052	89.10
13.5	599,344.	4,333.	0.0072	88.63
14.5	449,818.	65,213.	0.1450	87.99
15.5	335,156.	2,586.	0.0077	75.24
16.5	314,340.	1,979.	0.0063	74.66
17.5	211,746.	82,718.	0.3906	74.19
18.5	105,372.	0.	0.0000	45.21
19.5	68,955.	360.	0.0052	45.21
20.5				44.97
TOTALS	37,821,535.	301,033.		

* THE RETIREMENTS PRECEDED BY AN "X" ARE INCLUDED IN THIS COLUMN:

- X (1) REGULAR
- (2) REIMBURSED
- X (3) SALES
- (4) OUTLIERS
- X (5) FOR REBUILDING

SURVIVOR CURVE INDICATIONS

AGE RANGE YEARS 1972 - 1991

EXPERIENCE YEARS 1972 - 1992

CURVE INDICATIONS USING ALL SIGNIFICANT DATA

AGE RANGE: 0.0 - 20.5

% SURVIVING RANGE: 100.00 - 44.97

CURVE INDICATION RESIDUAL MEASURE

S2- 20.4	5.01
S3- 19.2	3.87
S4- 18.5	5.72
R3- 19.5	4.98
R4- 18.6	4.27
R5- 18.6	8.01
L2- 23.1	6.21
L3- 20.7	4.05
L4- 19.1	4.35

CURVE INDICATIONS USING DATA FROM 85% TO 15% SURVIVING

AGE RANGE: 15.5 - 20.5

% SURVIVING RANGE: 75.24 - 44.97

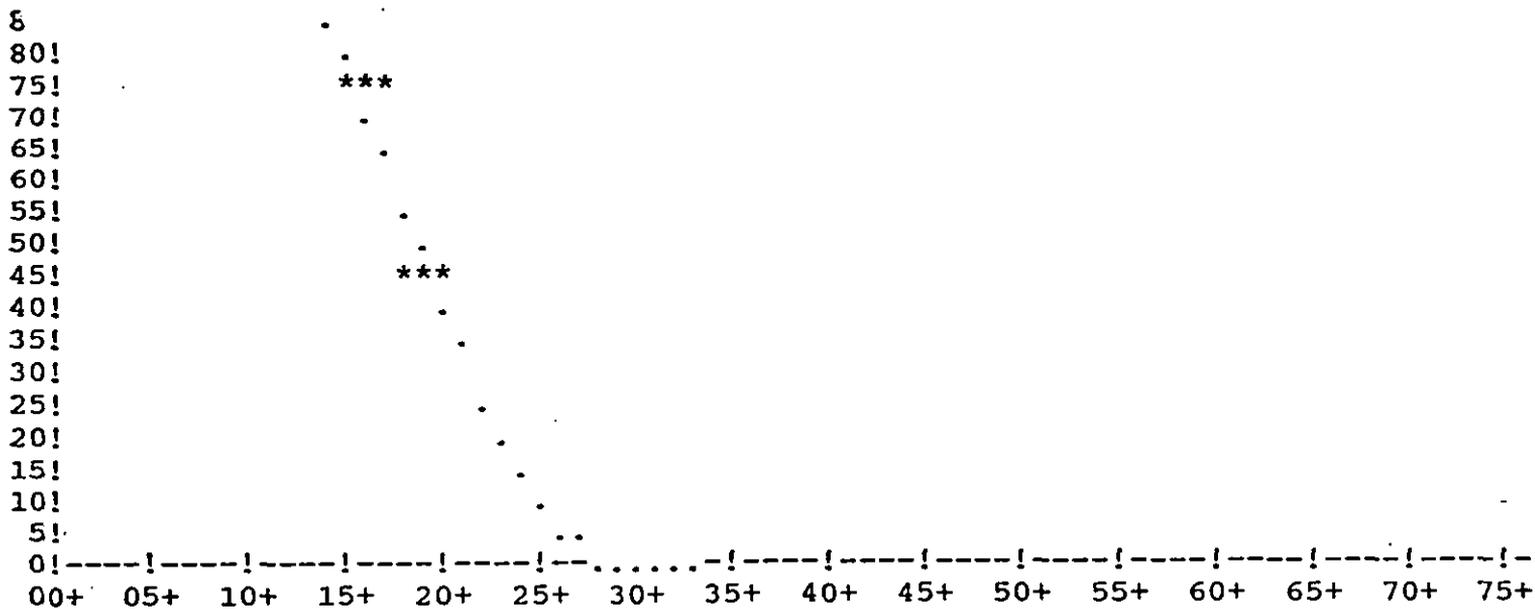
CURVE INDICATION RESIDUAL MEASURE

S2- 19.7	7.54
S3- 19.3	6.76
S4- 19.0	8.34
R2- 19.2	8.35
R3- 18.8	6.97
R4- 18.7	7.57
L2- 21.5	8.58
L3- 20.5	6.95
L4- 19.4	7.19

(X) CURVE OVERLAP
(*) P72-91 E72-92
(.) S3 19.3

00!XXXXXXXXXX

05! XX
10! XX*



FEDERAL ENERGY REGULATORY COMMISSION
OBSERVED LIFE TABLE # 4
(EXPERIENCE ANALYSIS)

COMPANIES -

14715 PENNSYLVANIA POWER & LIGHT CO (PA)

ACCOUNT - 398 MISCELLANEOUS EQUIPMENT

PLACEMENT YEARS 1910 - 1991
ANALYSIS IN DOLLARSEXPERIENCE YEARS 1972 - 1991
AVERAGE AGE OF RETIREMENTS 17.1

AGE AT BEGIN. OF INTERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS* DURING AGE INTERVAL	RETIRE- MENT RATIOS	PCT SURV AT BEGINNING OF AGE INTERVAL
0.0	2,628,977.	0.	0.0000	100.00
0.5	3,183,194.	4,762.	0.0015	100.00
1.5	3,110,013.	6,485.	0.0021	99.85
2.5	2,935,434.	19,277.	0.0066	99.64
3.5	2,861,805.	6,249.	0.0022	98.99
4.5	2,636,522.	12,828.	0.0049	98.77
5.5	2,512,007.	127,080.	0.0506	98.29
6.5	2,237,520.	20,794.	0.0093	93.32
7.5	2,089,595.	10,574.	0.0051	92.45
8.5	1,909,384.	13,516.	0.0071	91.98
9.5	1,856,685.	41,677.	0.0224	91.33
10.5	1,579,123.	22,130.	0.0140	89.28
11.5	1,458,786.	53,516.	0.0367	88.03
12.5	1,290,616.	15,272.	0.0118	84.80
13.5	1,240,436.	18,444.	0.0149	83.80
14.5	1,126,838.	11,785.	0.0105	82.55
15.5	1,038,075.	13,212.	0.0127	81.69
16.5	931,599.	8,675.	0.0093	80.65
17.5	892,169.	4,672.	0.0052	79.90
18.5	845,414.	5,600.	0.0066	79.48
19.5	785,079.	9,976.	0.0127	78.95
20.5	333,421.	2,115.	0.0063	77.95
21.5	260,649.	4,520.	0.0173	77.46
22.5	260,238.	5,301.	0.0204	76.11
23.5	245,682.	3,596.	0.0146	74.56
24.5	217,330.	10,528.	0.0484	73.47
25.5	205,557.	3,852.	0.0187	69.91
26.5	194,530.	14,892.	0.0766	68.60
27.5	178,623.	19,642.	0.1100	63.35
28.5	161,488.	9,401.	0.0582	56.38
29.5	153,915.	20,212.	0.1313	53.10
30.5	121,048.	20,698.	0.1710	46.13
31.5	100,970.	4,657.	0.0461	38.24
32.5	92,907.	7,735.	0.0833	36.48
33.5	82,975.	4,494.	0.0542	33.44
34.5	72,213.	5,625.	0.0779	31.63

35.5
36.5

66,241.
59,337.

2,625.
1,707.

0.0396
0.0288

29.17
28.01

AGE AT IN. OF PERVAL	EXPOSURES AT BEGINNING OF AGE INTERVAL	RETIREMENTS* DURING AGE INTERVAL	RETIRE- MENT RATIOS	PCT SURV AT BEGINNING OF AGE INTERVAL
37.5	50,011.	6,510.	0.1302	27.20
38.5	42,295.	2,079.	0.0492	23.66
39.5	38,920.	3,358.	0.0863	22.50
40.5	31,307.	2,832.	0.0905	20.56
41.5	31,639.	5,133.	0.1622	18.70
42.5	26,383.	1,824.	0.0691	15.66
43.5	28,349.	2,789.	0.0984	14.58
44.5	26,569.	1,117.	0.0420	13.15
45.5	28,285.	4,009.	0.1417	12.59
46.5	24,977.	1,765.	0.0707	10.81
47.5	23,823.	12,759.	0.5356	10.05
48.5	11,110.	600.	0.0540	4.67
49.5	11,361.	2,533.	0.2230	4.41
50.5	8,753.	1,375.	0.1571	3.43
51.5	7,390.	802.	0.1085	2.89
52.5	6,588.	519.	0.0788	2.58
53.5	6,153.	2,039.	0.3314	2.37
54.5	4,124.	196.	0.0475	1.59
55.5	3,919.	1,157.	0.2952	1.51
56.5	2,823.	228.	0.0808	1.07
57.5	2,663.	801.	0.3008	0.98
58.5	1,763.	110.	0.0624	0.68
59.5	1,661.	378.	0.2276	0.64
60.5	1,351.	199.	0.1473	0.50
61.5	1,350.	698.	0.5170	0.42
62.5	652.	118.	0.1810	0.20
63.5	534.	12.	0.0225	0.17
64.5	522.	0.	0.0000	0.16
65.5	522.	98.	0.1877	0.16
66.5	424.	10.	0.0236	0.13
67.5	414.	118.	0.2850	0.13
68.5	296.	61.	0.2061	0.09
69.5	235.	71.	0.3021	0.07
70.5	164.	85.	0.5183	0.05
71.5	79.	8.	0.1013	0.02
72.5	71.	68.	0.9577	0.02
73.5	3.	3.	1.0000	0.00
74.5				0.00
TOTALS	42,383,878.	624,586.		

THE RETIREMENTS PRECEDED BY AN "X" ARE INCLUDED IN THIS COLUMN:

- X (1) REGULAR
- (2) REIMBURSED
- X (3) SALES
- (4) OUTLIERS
- X (5) FOR REBUILDING

SURVIVOR CURVE INDICATIONS

CEMENT YEARS 1910 - 1991

EXPERIENCE YEARS 1972 - 1991

CURVE INDICATIONS USING ALL SIGNIFICANT DATA

AGE RANGE: 0.0 - 74.5 % SURVIVING RANGE: 100.00 - 0.00

CURVE INDICATION	RESIDUAL MEASURE
S0- 29.5	4.37
S1- 29.5	3.58
S2- 29.5	5.44
R1- 29.5	3.78
R2- 29.5	3.66
R3- 29.5	6.61
L1- 29.5	5.88
L2- 29.5	4.93
L3- 29.5	5.89

CURVE INDICATIONS USING DATA FROM 85% TO 15% SURVIVING

AGE RANGE: 12.5 - 42.5 % SURVIVING RANGE: 84.80 - 15.66

CURVE INDICATION	RESIDUAL MEASURE
S0- 29.9	6.56
S1- 29.6	4.79
S2- 29.3	7.02
R1- 29.3	5.50
R2- 29.0	4.58
R3- 29.1	8.89
L1- 31.4	7.41
L2- 30.5	5.99
L3- 29.7	7.91

PA PUBLIC UTILITY COMMISSION
V. PENNSYLVANIA POWER & LIGHT
COMPANY
DOCKET NO. R-00943271

OCA CROSS EXAMINATION EXH. NO. 5

DATE ENTERED: 3/21/95
Hlg JK

DOCKETED
JUN 13 1995

RECEIVED
JUN 01 1995
PUBLIC UTILITY COMMISSION
SECRETARY BUREAU

**DOCUMENT
FOLDER**

**Pennsylvania Power & Light Company
Response to Interrogatories of the
Office of Consumer Advocate, Set III
Dated January 30, 1995
Docket No. R-00943271**

Please refer to Exhibit DSH-1, Service Life Study.

- Q. 10. In section 1, Life Analysis Summary, in the subsection headed "Amortization,"
- a. Please provide interview notes with "responsible groups within the Company regarding estimated useful life of specific equipment within each account."
 - b. Provide workpapers showing the calculation of the dollar weighting of equipment lives.
- A. 10. a. Interview notes made during meetings with the responsible groups were made directly on copies of PP&L's Continuing Property Records. These records list PP&L's investment by location by account at the retirement unit level. The interview notes requested are extremely voluminous. They are available for review at PP&L's office facilities at 2 North Ninth Street, Allentown, Pennsylvania.
- b. Workpapers for accounts 391.2, 391.4, 393.0, 394.4, 394.8, 395.0, and 398.0 are provided in Attachment 1. It should be noted that Accounts 394.0 and 394.6 are assumed to contain equipment similar to accounts 394.4 and 394.8.

Account 3912

	<u>15-20</u>	<u>20</u>		
8567-8 Filing Equip		1,971,538		
8581-2 Furniture & Office	4,013,620			
8607 Movable Partitions		434,199		
8492 Storage Equip	0	<u>398,249</u>		
	4,013,620	2,803,986	6,817,606	
low \$yr	60,204,300	56,079,720	116,284,020	17
high \$yr	80,272,400	56,079,720	136,352,120	20

Account 3914

	<u>5-7</u>	<u>7-10</u>	<u>15-20</u>		
8550 FAX	32,591				
8555 Dictating Machines		65,772			
8559 Drafting Equip		36,866			
8557 Folding Machine			15,966		
8594 Mech Office Equip			57,309		
8605 Paper Punch			10,797		
8613 Photo Equip		352,921			
8654 TVs	106,564				
8655 Transcribers		30,918			
8657 Typewriters			1,878,552		
8669 Lettering Equip	0	13,352	0		
Total	139,155	499,829	1,962,624	2,601,608	
low \$yr	695,775	3,498,803	29,439,360	33,633,938	13
high \$yr	974,085	4,998,290	39,252,480	45,224,855	17

Account 3930

	<u>10</u>	<u>15-20</u>	<u>30</u>		
loc 5470			27,273		
loc 5443					
8945 Coiling Machines		10,238			
8954 Scales	21,223				
9426 Storage Equip	<u>0</u>	<u>0</u>	<u>212,833</u>		
	21,223	10,238	240,106	271,567	
low \$yr	212,230	153,570	7,203,180	7,568,980	28
high \$yr	212,230	204,760	7,203,180	7,620,170	28

Account 3944

	<u>5-7</u>	<u>7-10</u>	<u>10-15</u>	<u>15-20</u>	<u>20-25</u>	<u>30</u>	<u>40</u>
Construction - Tools & Equip (5470)							
3478 Marine Equip					165,047		
8565 Fans				142,868			
8653 Surveying Equip				51,715			
8815 Office Trailers						181,952	
8870 Cleaning Equip			73,058				
8947 Cranes					32,624		
8952 Trolley					68,689		
8954 Scales						62,208	
8990 Cleaning Machine				45,486			
8991 Decon Equip	73,446						
9005 Concrete Equip					36,288		
9014 Concrete Equip					66,189		
904X Hoists				459,688			
9048 Compressor					42,216		
9062+ Metal Equip							1,052,394
9084 Drills	130,483						
9093 Metal Equip							111,804
9098 Metal Equip							56,580
9099 Metal Equip							61,383
9105 Bending Equip				133,626			
9113 Metal Equip			488,332				
9115 Motors			23,893				
9123 Hydraulic Equip					256,354		
9127 Sand Blast							165,761
9134 Pipe Threading				29,572			
9138 Pneumatic Equip					123,497		
9140 Pneumatic Equip					199,390		
9141 Pneumatic Equip					70,090		
9143 Pneumatic Equip					51,041		
9145 Concrete Breakers					116,771		
9148 Pneumatic Equip					51,840		
9149 Pneumatic Equip					22,080		
9162 Gas Pumps				130,646			
9164 Electric Pumps					392,809		
9182 Safety Equip	56,154						
9131 Welding					930,507		
9133 Welding					3,900		
9136 Welding					50,278		
9244 Stationary Equip							105,346

9259 Hand Tools		505,450							
9261 Misc					261,377				
9262 Misc		936,711							
9274 Dynamometer				99,321					
9326 Test Sets				72,621					
9348 Safety	122,914								
9377 Elec Test				303,261					
9379 Elec Test				95,827					
9400 Gas Analysis	32,513								
9426 Storage	0	0	0	0	0	0	326,380		
Total	415,510	1,442,161	1,156,313	1,254,978	2,679,610	244,160	1,879,648	9,072,380	
Low \$yr	2,077,550	10,095,127	11,563,130	18,824,670	53,592,200	7,324,800	75,185,920	178,663,397	20
High \$yr	2,908,570	14,421,610	17,344,695	25,099,560	66,990,250	7,324,800	75,185,920	209,275,405	23

Account 3948

	<u>20</u>	<u>20-30</u>	<u>40-50</u>		
8872 Gas Equip	24,300				
8874 Tanks		92,246			
8900 Lifts	118,731				
9047 Hoists	<u>0</u>	<u>0</u>	<u>68,168</u>		
	143,031	92,246	68,168	303,445	
low \$yr	2,860,620	1,844,920	2,726,720	7,432,260	24.4929394
high \$yr	2,860,620	2,767,380	3,408,400	9,036,400	29.7793669

Account 3950

	<u>3-5 yrs</u>	<u>5-7 yrs</u>	<u>10 yrs</u>	<u>20-30 yrs</u>	<u>Total</u>	<u>Life</u>
Electrical Test (2780)						
9290 Scopes		113,007				
9326 Test Sets			174,580			
9346 Power Supply	6,376					
9377 Test Equip	5,751	12,285	203,550			
9378 Test Equip			189,462			
9379 Test Equip	<u>25,363</u>	<u>0</u>	<u>0</u>			
S/T	37,490	125,292	567,592		730,374	
low \$yrs	112,470	626,460	5,675,920		6,414,850	8.782966
high \$yrs	187,450	877,044	5,675,920		6,740,414	9.2287157
Mechanical Test (2781)						
9195 Test Equip		43,729				
9197 Test Equip		79,472	106,210			
9209 Vib Mon		20,910		7,872		
9210 Test Equip	6,587					
9211 Test Equip		4,887				
9283 Manometer		19,851				
9346 Misc		12,225	10,323			
9412 Mat'l Testing	<u>0</u>	<u>27,730</u>	<u>0</u>	<u>0</u>		
S/T	6,587	208,804	116,533	7,872	339,796	
low \$yrs	19,761	1,044,020	1,165,330	157,440	2,386,551	7.0234817
high \$yrs	32,935	1,461,628	1,165,330	236,160	2,896,053	8.5229167
Chemical Lab (2782)						
Everything			361,137		361,137	
			3611370		3,611,370	10
System Meters (2784)						
9191 Test Equip				45,560		
9284 Meter Test				337,738		
9290 Scopes			13,562			
9319 Test Boards				1,012,114		
9323 Test tables				5,218		
9325 Radio Test			2,189			
9326 Test Sets				3,603		
9328 Trans Current				1,764		
9333 Voltmeter			2,116			
9345 Wattmeter				4,306		
9346 Misc.			116,234			
9377 Test Equip			14,877			
9379 Test Equip	<u>0</u>	<u>0</u>	<u>27,607</u>	<u>0</u>		
S/T			176,585	1,410,303	1,586,888	
low \$yrs			1,765,850	28,206,060	29,971,910	18.887225
high \$yrs			1,765,850	42,309,090	44,074,940	27.774449
Total	44,077	334,096	1,221,847	1,418,175	3,018,195	
low \$yrs	132,231	1,670,480	12,218,470	28,363,500	42,384,681	14.043056
high \$yrs	220,385	2,338,672	8,607,100	42,545,250	53,711,407	17.79587

Account 3980	5-7	7-10	8	10	15	15-20	20	20-30	30-40		
<u>Loc 2790</u>											
3142 Ash Pump						34,039					
9073 Lathe									16,671		
9182 Safety Equip	1,503		8,051								
9262 Laser Allignment					21,719						
9377 Elec Test						47,573					
<u>Loc 5440</u>											
9455 Cafe Equip				17,713			217,671				
<u>Loc 5455</u>											
6990 Elec Trng Equip							73,808		466,788		
8613 Photo Equip		29,747									
9654 TVs	99,224										
9115 Motors (Engines)							14,995				
9319 Test Panels							19,078				
9426 Storage Equip									13,300		
<u>Loc 5472</u>											
8572 Fire Ext	0	0	0	0	0	0	0	892,361	0		
	100,727	29,747	8,051	17,713	21,719	81,612	325,552	892,361	496,759	1,974,241	
	503,635	208,229	64,408	177,130	325,785	1,224,180	6,511,040	17,847,220	14,902,770	41,764,397	21
	705,089	297,470	64,408	1,771,300	325,785	1,632,240	6,511,040	26,770,830	19,870,360	57,948,522	29

PPLICA CROSS-EXAMINATION

EXHIBIT NO. 1

3/21/95 Hbg JK

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PENNSYLVANIA PUBLIC UTILITY COMMISSION, ET AL. v.

PENNSYLVANIA POWER & LIGHT COMPANY,

DOCKET NO. R-00943271

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**Pennsylvania Power & Light Company
Response to Interrogatories of the
Office of Consumer Advocate, Set IV
Dated February 1, 1995
Docket No. R-00943271**

- Q. 87. Please identify each fossil fuel generating facility which PP&L has retired, the capacity of that facility, the date retired, the decommissioning cost and the amount of any salvage realized. Also state the disposition of the land subsequent to the decommissioning of the generating facility.
- A. 87. Attachment 1 provides a list of fossil-fueled generating facilities which PP&L has retired noting the capacity and the date retired. Decommissioning costs and salvage and the disposition of the land have been noted where available.

<u>Station</u>	<u>Retirement Date</u>	<u>Capacity (MW)</u>	<u>Decommissioning Amount</u>	<u>Salvage</u>
Millersburg	1951	4.250	10,630.01	20,512.63
Locust Spring	1951	6.000	20,863.53	60,617.40
Swengel	1951	0.200	7,295.48	4,586.04
Carlisle	1951	2.000	11,608.42	10,147.40
Walnut	1951	1.750	1,377.75	981.67
Lock Haven	1952	4.500		93.15
Bennett	1952	2.000	1,461.16	8,414.98
South Milton	1953	8.000	3,008.40	44,685.63
Good Spring	1953	8.000	201.48	19,625.00
Allentown	1953	38.812	28,383.37	102,434.95
Kulpmont	1953	12.000	8,821.27	38,059.79
Lykens	1953	15.400	2,963.96	58,042.92
Williamsport	1953	20.000	138.14	22,570.54
Suburban #3 & #6	1956	14.000	66,550.12	84,919.47
Illuminating	1956	5.700	13,125.60	23,410.93
Suburban LP	1957	48.000		
Cedar	1962	27.000	7,612.16	38,891.43
Harwood	1962	41.500	937.32	71,048.65
Pine Grove	1965	55.000	5,519.93	183,680.00
Suburban #7	1967	25.000	42,104.10	12,741.30
Hauto	1969	70.000	12,647.86	34,055.56
Stanton	1972	50.000	618.71	110,020.00
Holtwood LP	1972	30.000		
Suburban	1988	29.250	707,375.89	68,259.99

<u>Station</u>	<u>Site Use</u>
Millersburg	Storage
Locust Spring	Sold
Swengel	Sold
Carlisle	Sold
Walnut	Sold
Lock Haven	Sold
Bennett	Sold
South Milton	Sold
Good Spring	Sold
Allentown	Sold
Kulpmont	Sold
Lykens	Sold
Williamsport	Sold
Suburban #3 & #6	SES- Demolished
Illuminating	Unknown
Suburban LP	Unknown
Cedar	Sold
Harwood	SES- Demolished
Pine Grove	Sold
Suburban #7	SES- Demolished
Hauto	SES- Demolished
Stanton	SES- Demolished
Holtwood LP	Units Removed
Suburban	SES- Demolished

PPLICA CROSS-EXAMINATION

EXHIBIT NO. 2

3/21/95 Hbg JK

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PENNSYLVANIA POWER & LIGHT COMPANY,

DOCKET NO. R-00943271

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SECRETARY BUREAU

D. S. Hoch
J. M. Kleha

**Pennsylvania Power & Light Company
Response to Interrogatories of the
Office of Consumer Advocate, Set III
Dated January 30, 1995
Docket No. R-00943271**

- Q. 6. If the Pennsylvania PUC were to reject PP&L's request for levelizing depreciation on pre-1989 Susquehanna Units 1 and 2 investment, and continued with the modified sinking fund, by how much would test year revenue requirements changed?
- A. 6. The PUC jurisdictional revenue requirements effect of PP&L's proposal to levelize Susquehanna SES modified sinking fund depreciation for the 12 months ended September 30, 1995 is \$30,626,810.

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JUN 13 1995

OFFICE OF TRIAL STAFF

CROSS-EXAMINATION
EXHIBIT NO. 1
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PUBLIC UTILITY COMMISSION
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DATE: MARCH 21, 1995

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PA PUBLIC UTILITY COMMISSION
vs.
PENNSYLVANIA POWER & LIGHT COMPANY
DOCKET NO: R-00943271

P.R. Moul

Pennsylvania Power & Light Company
 Response to Interrogatories of
 the Office of Trial Staff
 Dated February 23, 1995

 Docket No. R-00943271

- Q. OTS-RR-7. Please provide the workpapers for calculating the averages for the alphabetical bond and stock ratings that appear on page 2 of Schedule 2 and page 3 of Schedule 3 of Exhibit PRM-1.
- A. OTS-RR-7. There are no workpapers for the average bond rating or stock ratings shown on Schedule 2, page 2 of Exhibit PRM-1. Numerical values were assigned as follows and averages were computed.

<u>Moody's Bond Rating</u>	<u>Standard & Poor's Bond Rating</u>	<u>Standard & Poor's Stock Ranking</u>	<u>Value</u>
Aaa	AAA	A+	1
Aa1	AA+	A	2
Aa2	AA	A-	3
Aa3	AA-	B+	4
A1	A+	B	5
A2	A	B-	6
A3	A-	C+	7
Baa1	BBB+	C	8
Baa2	BBB	C-	9
Baa3	BBB-		10

P.R. Moul

Pennsylvania Power & Light Company
Response to Interrogatories of
the Office of Trial Staff
Dated February 23, 1995

Docket No. R-00943271

- Q. OTS-RR-13. Please define the scenarios in which Mr. Moul would typically employ a twelve month dividend yield for the purpose of DCF calculation.
- A. OTS-RR-13. As explained on Pages 39-41 of Statement 12, the Direct Testimony of Paul R. Moul, Mr. Moul "typically" employs 12-month dividend yields in his DCF computations when capital cost rates are relatively stable.

P.R. Moul

Pennsylvania Power & Light Company
Response to Interrogatories of
the Office of Trial Staff
Dated February 23, 1995
Docket No. R-00943271

- Q. OTS-RR-14. With reference to Appendix C, page 6, lines 12-15, please provide any academic evidence in support of the ex-dividend adjustment to dividend yields. In addition, please provide any investor influencing financial publications that provide this adjusted dividend yield to investors.
- A. OTS-RR-14. The ex-dividend effect on stock price discussed by James C. Van Horne in Financial Management and Policy, provided as Attachment 1, was relied upon by Mr. Moul to conclude that such an adjustment to the stock price is proper.

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PART 3
Financing and
Dividend
Policies

reported accounting earnings and other information, share price will respond. Put another way, dividends speak louder than words under these circumstances. The rationale behind a dividend signaling effect is similar to a capital structure signaling effect, described in Chapter 9.

However, it generally is agreed that the effect is more important for dividends than it is for capital structure. While there are a number of factors that may explain dividends' impact on valuation, many are difficult to test. Most empirical testing has concentrated on the tax effect and on financial signaling. This is not to say that such things as flotation costs, transactions costs, institutional restrictions, and preference for dividends have no effect; only that whatever effect they might have is swamped by the two effects discussed.

EMPIRICAL TESTING AND IMPLICATIONS FOR PAYOUT BEHAVIOR

The testing of whether or not dividends have an effect on share price has taken several forms. Again, the major thrust in orientation has been on the tax effect and on financial signaling. As we will discover, the evidence is far from uniform, which makes generalizations difficult, if not just downright unwise.

EX-DIVIDEND DAY TESTS

One of the mainstays has involved the ex-dividend behavior of common stock prices. As we explain in Chapter 12, companies paying dividends establish an ex-dividend date. Investors buying the stock before that date are entitled to the dividend declared; purchases on or after the ex-dividend date are not entitled to the dividend. In a nontaxable world, the stock should drop in value by the amount of the dividend on the ex-dividend day. If you are a taxable investor, however, and buy the stock before the ex-dividend day, you will need to pay taxes on the dividend. In contrast, if you wait until the ex-dividend day to buy the stock, you will pay no taxes on the dividend, since there is no dividend, and any price movement presumably is subject only to the capital-gains tax. A number of authors reason that if there is a tax effect, owing to capital gains being taxed at a lower rate than dividend income, a stock should decline in price by less than the dividend on the ex-dividend day. Expressed differently, investors would value a dollar of dividends less than they would a dollar of capital gains.

An earlier study of the phenomenon was by Elton and Gruber.²² In a sample of companies, they found that on average a stock declined by .78 of the dividend

²² Edwin J. Elton and Martin J. Gruber, "Marginal Stockholder Tax Rates and the Clientele Effect," *Review of Economics and Statistics*, 52 (February 1970), 68-74.

on the ex-dividend date. They interpret this result as consistent with a clientele effect where investors in high tax brackets show a preference for capital gains over dividends, and vice versa.

There have been a number of other studies of share price behavior on the ex-dividend day.¹² In general, the evidence is consistent with the foregoing, namely, that stock prices decline on the ex-dividend day but by less than the amount of the dividend. Many view these findings as consistent with a tax effect where dividends are taxed more heavily than are capital gains, and stock prices reflect this differential. However, others argue that biases in conceptual foundation as well as in methodology negate the ex-dividend day approach to implying tax rates or tax clientele effects.¹³ While the evidence is reasonably consistent across studies, its interpretation is not.

DIVIDEND YIELD APPROACH

A second approach to the tax effect question is to study the relationship between dividend yields and stock returns, where other influences on returns are isolated. One of the earlier studies here was by Black and Scholes.¹⁴ In testing a modification of the capital asset pricing model to measure the deviation of a stock's dividend yield from that of the market portfolio, they find the coefficient of the variable to be insignificant. Stocks with high payout ratios did not provide returns significantly different from those with low payout ratios. The authors interpret this finding as consistent with the idea that dividend policy does not matter. Miller and Scholes, in later studying the issue with a new sample, claim that after isolating for information effects, there is no relationship between returns and dividend yields.¹⁵ The differential tax explanation of dividend yield and stock returns has been challenged by others as well.¹⁶

As we know from Chapter 3, however, many authors have found a positive relationship between expected before-tax returns and dividend yields, holding other things constant. Perhaps the leading investigators here are Litzenberger and

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CHAPTER 11
Dividend
Payout Ratio
and Valuation

¹²Avner Kalay, "The Ex-Dividend Day Behavior of Stock Prices: A Re-examination of the Clientele Effect," *Journal of Finance*, 37 (September 1982), 1059-70; Kenneth M. Eades, Patrick J. Hess, and E. Han Kim, "On Interpreting Security Returns During the Ex-Dividend Period," *Journal of Financial Economics*, 13 (March 1984), 3-34; Patrick J. Hess, "The Ex-Dividend Day Behavior of Stock Returns: Further Evidence on Tax Effects," *Journal of Finance*, 37 (May 1982), 445-56; James M. Poterba and Lawrence R. Summers, "New Evidence That Taxes Affect the Valuation of Dividends," *Journal of Finance*, 39 (December 1984), 1397-1416; Michael Barclay, "Tax Effects with No Taxes: Further Evidence on the Ex-Dividend Day Behavior of Common Stock Prices," working paper, Stanford University (September 1984); and Costas P. Kaplanis, "Options, Taxes, and Ex-Dividend Day Behavior," *Journal of Finance*, 41 (June 1986), 411-24.

¹³See Kalay, "The Ex-Dividend Day Behavior of Stock Prices"; Jerry Green, "Taxation and the Ex-Dividend Day Behavior of Common Stock Prices" working paper, National Bureau of Economic Research, Cambridge, Mass. (1980); and Hess, "The Ex-Dividend Day Behavior of Stock Returns."

¹⁴Black and Scholes, "The Effects of Dividend Yield and Dividend Policy on Common Stock Prices and Returns."

¹⁵Miller and Scholes, "Dividends and Taxes."

¹⁶See Marshall Blume, "Stock Returns and Dividend Yields: Some More Evidence," *Review of Economics and Statistics*, 62 (November 1980), 567-77.

P.R. Moul

Pennsylvania Power & Light Company
Response to Interrogatories of
the Office of Trial Staff
Dated February 23, 1995
Docket No. R-00943271

- Q. OTS-RR-15. Please provide the workpapers for the ex-dividend adjustment to the dividend yields for PP&L and the Barometer Group. Please include the pre-adjusted dividend yields so that the amount of the adjustment can be ascertained.
- A. OTS-RR-15. Attachment 1 provides copies of workpapers for the dividend yield calculations. No separate calculations were made prior to the ex-dividend computed dividend yield (i.e., the price was adjusted for the time-related ex-dividend amount and the yield then was calculated with the annualized dividend amount).

**Monthly Dividend Yields (1) for Pennsylvania Power & Light Co. and
the Barometer Group of Eight Electric Companies
for the Twelve Months Ending October 1994**

	<u>Nov-93</u>	<u>Dec-93</u>	<u>Jan-94</u>	<u>Feb-94</u>	<u>Mar-94</u>	<u>Apr-94</u>	<u>May-94</u>	<u>Jun-94</u>	<u>Jul-94</u>	<u>Aug-94</u>	<u>Sep-94</u>	<u>Oct-94</u>	<u>12-Month Average Nov-93 through Oct-94</u>	<u>6-Month Average May-94 through Oct-94</u>	<u>3-Month Average Aug-94 through Oct-94</u>
Pennsylvania Power & Light Co.	8.22%	8.13%	8.67%	7.03%	7.29%	8.84%	7.68%	8.55%	8.23%	8.05%	8.39%	8.67%	<u>7.48%</u>	<u>8.26%</u>	<u>8.37%</u>
Barometer Group of Eight Electric Companies															
Allegheny Power System	8.29%	8.21%	8.83%	8.91%	7.24%	7.01%	7.86%	7.85%	7.67%	7.41%	8.18%	7.99%			
American Electric Power	8.68%	8.53%	8.75%	7.28%	7.90%	7.51%	8.36%	8.61%	8.02%	7.68%	7.74%	7.64%			
Atlantic Energy Inc	7.23%	7.10%	7.27%	7.68%	7.63%	7.31%	8.77%	9.10%	8.19%	8.97%	9.45%	9.24%			
Baltimore Gas & Electric	5.95%	5.86%	6.04%	6.46%	6.43%	6.20%	6.81%	7.00%	6.71%	6.71%	6.64%	6.60%			
Delmarva Power & Light Dpl Inc	8.88%	8.62%	8.95%	7.45%	7.60%	7.36%	8.42%	8.67%	8.20%	8.20%	8.37%	8.20%			
Potomac Electric Power	8.38%	8.17%	8.51%	8.92%	7.52%	7.28%	8.47%	8.82%	8.12%	8.26%	8.70%	8.76%			
Public Service Entrp	6.78%	6.79%	6.91%	7.24%	7.80%	7.64%	7.94%	8.36%	7.88%	7.94%	8.28%	8.34%			
Average	<u>8.50%</u>	<u>8.35%</u>	<u>8.55%</u>	<u>8.95%</u>	<u>7.23%</u>	<u>8.99%</u>	<u>7.79%</u>	<u>8.05%</u>	<u>7.58%</u>	<u>7.63%</u>	<u>7.93%</u>	<u>7.83%</u>	<u>7.28%</u>	<u>7.80%</u>	<u>7.80%</u>

Note: (1) Monthly dividend yields are calculated by dividing the annualized quarterly ex-dividend (multiplying the quarterly ex-dividend by 4) by the month-end closing stock price adjusted by an ex-dividend factor.

Source of Information: Interactive Data Corporation
OneSource
Standard & Poor's Utility Compustat

Case Name PP&L - 9420

Ex-Dividend Dates

NDDT	30-Nov-93	31-Dec-93	31-Jan-94	28-Feb-94	31-Mar-94	29-Apr-94	31-May-94	30-Jun-94	29-Jul-94	31-Aug-94	30-Sep-94	31-Oct-94
PPL	03-Sep-93	06-Dec-93	06-Dec-93	06-Dec-93	04-Mar-94	04-Mar-94	04-Mar-94	06-Jun-94	06-Jun-94	06-Jun-94	02-Sep-94	02-Sep-94
AYP	19-Nov-93	07-Dec-93	07-Dec-93	07-Dec-93	08-Mar-94	08-Mar-94	08-Mar-94	07-Jun-94	07-Jun-94	07-Jun-94	12-Sep-94	12-Sep-94
AEP	04-Nov-93	04-Nov-93	04-Nov-93	04-Feb-94	04-Feb-94	04-Feb-94	04-May-94	04-May-94	04-May-94	04-Aug-94	04-Aug-94	04-Aug-94
ATE	14-Sep-93	14-Dec-93	14-Dec-93	14-Dec-93	15-Mar-94	15-Mar-94	15-Mar-94	14-Jun-94	14-Jun-94	14-Jun-94	13-Sep-94	13-Sep-94
BGE	03-Sep-93	06-Dec-93	06-Dec-93	06-Dec-93	04-Mar-94	04-Mar-94	04-Mar-94	06-Jun-94	06-Jun-94	06-Jun-94	06-Sep-94	06-Sep-94
DEW	06-Oct-93	06-Oct-93	07-Jan-94	07-Jan-94	07-Jan-94	08-Apr-94	08-Apr-94	08-Apr-94	08-Jul-94	08-Jul-94	08-Jul-94	07-Oct-94
DPL	28-Oct-93	28-Oct-93	28-Oct-93	08-Feb-94	08-Feb-94	08-Feb-94	09-May-94	09-May-94	09-May-94	09-Aug-94	09-Aug-94	09-Aug-94
POM	22-Nov-93	22-Nov-93	22-Nov-93	18-Feb-94	18-Feb-94	18-Feb-94	23-May-94	23-May-94	23-May-94	24-Aug-94	24-Aug-94	24-Aug-94
PEG	01-Sep-93	01-Dec-93	01-Dec-93	01-Dec-93	01-Mar-94	01-Mar-94	01-Mar-94	01-Jun-94	01-Jun-94	01-Jun-94	01-Sep-94	01-Sep-94

Month-End Closing Stock Price
CPRC

	30-Nov-93	31-Dec-93	31-Jan-94	28-Feb-94	31-Mar-94	29-Apr-94	31-May-94	30-Jun-94	29-Jul-94	31-Aug-94	30-Sep-94	31-Oct-94
PPL	26.875	27.000	25.250	24.125	23.000	24.625	22.125	19.625	20.500	21.125	20.000	19.500
AYP	26.125	26.500	25.000	24.125	22.750	23.625	21.250	21.000	21.625	22.500	20.125	20.750
AEP	36.125	37.125	36.125	33.125	30.750	32.500	28.875	28.250	30.500	31.500	31.375	32.000
ATE	21.625	21.750	21.375	20.375	20.250	21.250	17.875	17.000	19.000	17.500	16.375	16.875
BGE	25.250	25.375	24.750	23.250	23.125	24.125	22.750	21.250	22.875	23.000	23.000	23.250
DEW	22.625	23.625	22.250	20.875	20.625	21.000	18.500	18.125	18.875	19.000	18.750	18.875
DPL	19.375	20.625	21.250	19.875	19.875	21.250	20.125	19.875	20.375	20.250	19.500	20.375
POM	25.750	26.750	25.500	23.750	22.000	23.125	19.625	19.000	20.750	20.125	19.250	19.250
PEG	32.375	32.000	31.625	30.375	27.875	28.625	27.750	26.000	27.750	27.750	26.250	26.250

CSUTL Q142 Div/Shr--Ex-Date (Compustat Utility AP2 Fiscal Year-End Month (A)	Quarterly Ex-Dividend						
		NA	1993 Q1c 09/30/93	1993 Q2c 12/31/93	1993 Q3c 03/31/94	1993 Q4c 06/30/94	1994 Q1c 09/30/94	1994 Q2c 12/31/94
PPL	Pennsylvania Power & Light		\$0.412	\$0.412	\$0.417	\$0.417	\$0.417	NA
AYP	Allegheny Power System		\$0.410	\$0.410	\$0.410	\$0.410	\$0.410	NA
AEP	American Electric Power		\$0.600	\$0.600	\$0.600	\$0.600	\$0.600	NA
ATE	Atlantic Energy Inc		\$0.385	\$0.385	\$0.385	\$0.385	\$0.385	NA
BGE	Baltimore Gas & Electric		\$0.370	\$0.370	\$0.370	\$0.380	\$0.380	NA
DEW	Delmarva Power & Light		\$0.385	\$0.385	\$0.385	\$0.385	\$0.385	NA
DPL	Dpl Inc		\$0.280	\$0.280	\$0.295	\$0.295	\$0.295	NA
POM	Potomac Electric Power		\$0.410	\$0.410	\$0.415	\$0.415	\$0.415	NA
PEG	Public Service Entrp		\$0.540	\$0.540	\$0.540	\$0.540	\$0.540	NA

Case Name PP&L - 9420
 Days from Ex-Dividend Date

	30-Nov-93	31-Dec-93	31-Jan-94	28-Feb-94	31-Mar-94	29-Apr-94	31-May-94	30-Jun-94	29-Jul-94	31-Aug-94	30-Sep-94	31-Oct-94
PPL	88	25	56	84	27	56	88	24	53	86	28	59
AYP	11	24	55	83	23	52	84	23	52	85	18	49
AEP	26	57	88	24	55	84	27	57	86	27	57	88
ATE	77	17	48	76	16	45	77	16	45	78	17	48
BGE	88	25	56	84	27	56	88	24	53	86	24	55
DEW	55	86	24	52	83	21	53	83	21	54	84	24
DPL	33	64	95	20	51	80	22	52	81	22	52	83
POM	8	39	70	10	41	70	8	38	67	7	37	68
PEG	90	30	61	89	30	59	91	29	58	91	29	60

Adjusted Price

	30-Nov-93	31-Dec-93	31-Jan-94	28-Feb-94	31-Mar-94	29-Apr-94	31-May-94	30-Jun-94	29-Jul-94	31-Aug-94	30-Sep-94	31-Oct-94
PPL	26.48	26.89	24.99	23.74	22.88	24.37	21.72	19.52	20.26	20.73	19.87	19.23
AYP	26.08	26.39	24.75	23.75	22.65	23.39	20.87	20.90	21.39	22.12	20.04	20.53
AEP	35.95	36.75	35.54	32.97	30.39	31.95	28.70	27.87	29.93	31.32	31.00	31.42
ATE	21.30	21.68	21.17	20.05	20.18	21.06	17.55	16.93	18.81	17.17	16.30	16.67
BGE	24.89	25.27	24.52	22.91	23.02	23.89	22.38	21.15	22.65	22.64	22.90	23.02
DEW	22.39	23.26	22.15	20.66	20.27	20.91	18.28	17.77	18.79	18.77	18.39	18.77
DPL	19.27	20.43	20.94	19.81	19.71	20.99	20.05	19.71	20.11	20.18	19.33	20.11
POM	25.71	26.57	25.18	23.70	21.81	22.81	19.59	18.83	20.44	20.09	19.08	18.94
PEG	31.84	31.82	31.26	29.85	27.70	28.27	27.21	25.83	27.41	27.21	26.08	25.89

PPLICA CROSS-EXAMINATION

EXHIBIT NO. 3

3/21/95 Hbg JK

DOCUMENT
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JUN 13 1995

PENNSYLVANIA PUBLIC UTILITY COMMISSION, ET AL. v.

PENNSYLVANIA POWER & LIGHT COMPANY,

DOCKET NO. R-00943271

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JUN 01 1995

PUBLIC UTILITY COMMISSION
SECRETARY BUREAU

D. S. Hoch
J. M. Kleha

**Pennsylvania Power & Light Company
Response to Interrogatories of the
Office of Consumer Advocate, Set III
Dated January 30, 1995
Docket No. R-00943271**

Q. 7. Please refer to page 15, lines 4-5, which state that "the proposal [to substitute a levelized depreciation amount for the MSF amount] will not result in the recovery of any additional depreciation over this period." Will the Company's proposal result in the recovery of any additional revenues over this period? What is the increment in additional revenues over this period?

A.7. See Attachment 1.

Pennsylvania Power & Light Company

Incremental PUC Jurisdictional Revenue Associated with Proposal to Levelize Modified Sinking Fund Depreciation Expense

	<u>Mod S/F</u>	<u>Levelized</u>	<u>Expense Difference</u>	<u>Incremental Revenue</u>
1995	\$35,585,377	\$43,182,396	(\$7,597,019)	\$7,656,704
1996	157,510,240	172,729,583	(15,219,343)	15,338,908
1997	174,557,991	172,729,583	1,828,408	(1,842,772)
1998	<u>193,717,537</u>	<u>172,729,583</u>	<u>20,987,954</u>	<u>(21,152,840)</u>
	\$561,371,145	\$561,371,145	\$0	\$0