Duquesne Light Company
Comparison of Spot - Date Adjusted Stock Price and Average Adjusted Stock Price for Comparable Group of Companies

Company	Next Ex-Dividend Date [1]	Stock Price Date [2]	Number of Days to Next Ex-Date [3]	Percent of Days Expired	Last Dividend Paid	Adjusted Dividend	Closing Stock Price	Spot-Date Adjusted Price	Average Adjusted Price
				---(Percent)--	----------(Dollars)----------				
	(a)	(b)	[(a)-(b)] (c)	[(90-(c))/90] (d)	(e)	[(d)*(e)] (f)	(g)	[(g)-(f)] (h)	[(g)-(e)/2] (i)
Carolina Power & Light Co.	01-Oct-97	17-Jul-97	76	15.56	$ 0.47	$ 0.07	$ 35.38	$ 35.30	$ 35.14
Central and South West Corp.	04-Aug-97	17-Jul-97	18	80.00	0.44	0.35	21.75	21.40	21.53
Cinergy Corp.	27-Jul-97	17-Jul-97	10	88.89	0.45	0.40	33.75	33.35	33.53
DTE Energy Co.	15-Sep-97	17-Jul-97	60	33.33	0.52	0.17	29.50	29.33	29.24
Eastern Utilities Associates	25-Jul-97	17-Jul-97	8	91.11	0.42	0.38	19.38	19.00	19.17
Empire District Electric Co.	26-Aug-97	17-Jul-97	40	55.56	0.32	0.18	17.06	16.88	16.90
GPU, Inc.	21-Sep-97	17-Jul-97	66	26.67	0.49	0.13	35.88	35.75	35.63
Green Mountain Power Corp.	12-Sep-97	17-Jul-97	57	36.67	0.53	0.19	23.88	23.68	23.61
Idaho Power Co.	19-Jul-97	17-Jul-97	2	97.78	0.47	0.45	32.44	31.98	32.21
KU Energy Corp.	19-Aug-97	17-Jul-97	33	63.33	0.44	0.28	34.25	33.97	34.03
Minnesota Power & Light Co.	11-Aug-97	17-Jul-97	25	72.22	0.51	0.37	31.63	31.26	31.37
Nevada Power Co.	07-Oct-97	17-Jul-97	82	8.89	0.40	0.04	21.69	21.65	21.49
OGE Energy Corp.	06-Oct-97	17-Jul-97	81	10.00	0.67	0.07	45.69	45.62	45.36
PECO Energy Co.	21-Aug-97	17-Jul-97	35	61.11	0.45	0.28	22.38	22.10	22.15
PP&L Resources, Inc.	08-Sep-97	17-Jul-97	53	41.11	0.42	0.17	20.31	20.14	20.10
St. Joseph Light & Power Co.	29-Jul-97	17-Jul-97	12	86.67	0.24	0.21	16.63	16.42	16.51
United Illuminating Co.	03-Sep-97	17-Jul-97	48	46.67	0.72	0.34	34.06	33.73	33.70
								$ 27.739	$ 27.745

[1] The date the stock goes ex-dividend.
[2] Represents number of days in the quarter until the next ex-dividend date.
[3] Closing stock price for July 16, 1997 as listed in *The Wall Street Journal,* July 17, 1997.

Sources: *The Value Line, Investment Survey,* Edition 1, June 13; 1997, Edition 5, April 11, 1997 and Edition 11, May 23, 1997.
The Wall Street Journal, July 17, 1997.

Duquesne Light Company
Average Adjusted Stock Price
Comparable Group of Companies

Company	Average Stock Price [1]	Last Dividend Paid	Average Adjusted Price
	(Dollars)		
	(a)	(b)	[(a)-(b)/2] (c)
Carolina Power & Light Co.	$ 35.82	$ 0.47	$ 35.58
Central and South West Corp.	24.20	0.44	23.99
Cinergy Corp.	33.13	0.45	32.90
DTE Energy Co.	29.29	0.52	29.03
Eastern Utilities Associates	17.59	0.42	17.38
Empire District Electric Co.	18.11	0.32	17.95
GPU, Inc.	33.40	0.49	33.16
Green Mountain Power Corp.	24.00	0.53	23.74
Idaho Power Co.	31.00	0.47	30.77
KU Energy Corp.	30.59	0.44	30.37
Minnesota Power & Light Co.	28.17	0.51	27.92
Nevada Power Co.	20.51	0.40	20.31
OGE Energy Corp.	41.63	0.67	41.30
PECO Energy Co.	22.92	0.45	22.70
PP&L Resources, Inc.	21.86	0.42	21.65
St. Joseph Light & Power Co.	15.82	0.24	15.70
United Illuminating Co.	31.28	0.72	30.92
			$ 26.79

[1] Average of weekly (Friday) close prices from July 19, 1996 to July 18, 1997.

Sources: *The Value Line Investment Survey,* Edition 1, June 13, 1997; Edition 5, April 11, 1997 and Edition 11, May 23, 1997.
Factset Security Price History Report.

Duquesne Light Company
Annual DCF, Comparable Group of Companies

Company	Dividends Paid Q2 '96	Q3 '96	Q4 '96	Q1 '97	Dividend Sum (D_0)	Average Adjusted Price (P_0) [1]	B*R+S*V Growth [2]	EPS Growth Estimate [3]	Average Growth (g)	DCF Cost of Equity [4]
	(Dollars)				[(a)+(b)+(c)+(d)]		(Percent)			
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Carolina Power & Light Co.	$ 0.46	$ 0.46	$ 0.47	$ 0.47	$ 1.85	$ 35.58	2.61 %	3.11 %	2.86 %	8.49 %
Central and South West Corp.	0.44	0.44	0.44	0.44	1.74	23.99	3.28	6.94	5.11	13.13
Cinergy Corp.	0.43	0.43	0.45	0.45	1.76	32.90	6.23	5.72	5.98	11.94
DTE Energy Co.	0.52	0.52	0.52	0.52	2.06	29.03	3.74	8.82	6.28	14.22
Eastern Utilities Associates	0.42	0.42	0.42	0.42	1.66	17.38	1.67	4.84	3.26	13.64
Empire District Electric Co.	0.32	0.32	0.32	0.32	1.28	17.95	5.82	6.69	6.25	14.23
GPU, Inc.	0.49	0.49	0.49	0.49	1.94	33.16	5.43	8.71	7.07	13.66
Green Mountain Power Corp.	0.53	0.53	0.53	0.53	2.12	23.74	4.67	2.81	3.74	13.49
Idaho Power Co.	0.47	0.47	0.47	0.47	1.86	30.77	3.81	2.08	2.95	9.50
KU Energy Corp.	0.43	0.43	0.43	0.44	1.73	30.37	2.82	2.87	2.85	9.01
Minnesota Power & Light Co.	0.51	0.51	0.51	0.51	2.04	27.92	2.92	3.82	3.37	11.32
Nevada Power Co.	0.40	0.40	0.40	0.40	1.60	20.31	3.78	3.47	3.63	12.22
OGE Energy Corp.	0.67	0.67	0.67	0.67	2.66	41.30	3.35	1.49	2.42	9.36
PECO Energy Co.	0.44	0.44	0.45	0.45	1.77	22.70	3.40	2.63	3.01	11.47
PP&L Resources, Inc.	0.42	0.42	0.42	0.42	1.67	21.65	2.87	0.48	1.68	9.94
St. Joseph Light & Power Co.	0.24	0.24	0.24	0.24	0.95	15.70	0.46	4.56	2.51	9.01
United Illuminating Co.	0.72	0.72	0.72	0.72	2.88	30.92	2.14	4.27	3.21	13.33
	$ 0.46	$ 0.46	$ 0.47	$ 0.47	$ 1.86	$ 26.79	3.47 %	4.31 %	3.89 %	**11.65 %**

[1] Equals the June 16, 1997 closing stock price adjusted for the ex-dividend date.
[2] B*R+S*V uses a five year average of S, multiplied by current V.
[3] Calculated using 1996 and five year projected data.
[4] Annual DCF equals $[D_o*(1+g)/P_o/(1-5.00\%)+g]$.

Sources: *Utility Compustat II,* Standard & Poor's Compustat Services, Inc.
The Value Line, Investment Survey, Edition 1, June 13; 1997, Edition 5, April 11, 1997 and Edition 11, May 23, 1997.
Factset Security Price History Report.

DUQUESNE LIGHT COMPANY

DERIVATION OF SUSTAINABLE GROWTH WITH EXTERNAL STOCK FINANCING

The sustainable growth formula is:

$$g = B * R$$

where:

B = the expected retention rate (7.1)

R = the rate of return expected to be earned on common equity.

An assumption of the standard DCF model is that only one source of equity financing occurs, specifically the retention of earnings. That is, current dividends, D, are set at a constant percentage of normalized earnings, where normalized earnings are the expected rate of return on equity, R, applied to the current book value, V. Therefore, the sustainable growth formula is:

$$B = 1 - \frac{D}{(R_{av} * V)} \qquad (7.1)$$

and the long-run sustainable growth rate is:

$$g = B * R_{av}$$

$$= \left(1 - \frac{D}{(R_{av} * V)}\right) * R_{av} \qquad (7.2)$$

$$= R_{av} - \frac{D}{V}$$

where:

D = dividends declared per share, 2000-02 estimate

V = year-end book value per share, 2000-02 estimate

R_{av} = return on average equity.

However, the issuance and sale of new common equity can also increase earnings and dividends. Thus, the growth rate must be expanded to allow for continuous new equity financing. In the expanded formula, two activities are recognized: (1) investment decisions that earn the rate of R_{av}, and (2) stock financing operations which earn the rate $S*V$.

The sustainable growth would then be:

$$g = B * R_{av} + S * V \qquad (7.3)$$

where:

B = the fraction of earnings to be expected to be retained

R_{av} = the expected return on average equity

S = funds raised from the sale of stock as a fraction of existing common equity

V = the fraction of funds raised from the sale of stock that accrues to shareholders at the start of the period.

The $S*V$ term is a measure of the impact on growth of the sale of stock at prices above or below book value. If stocks are sold at a price which exceeds book value, a portion of the funds goes to shareholders, whereas, if stocks are sold at a price less than book value, stockholders' equity will be diluted. For instance, given a market-to-book ratio of 1.3, abstracting from market pressure and selling costs, 23 percent of the funds raised in the issuance (1 - 1/1.3) go to increasing the value of stockholders' pre-existing shares ($V = 0.23$). If the new issuance is equal to 10 percent of the existing equity ($S = 0.1$), then $S*V = 0.023$, meaning that ignoring the $S*V$ term in such a circumstance would understate k_e (cost of equity) by 2.3 percent.

Note: The expanded growth rate (and hence, the expanded DCF formula) will reduce to the standard version either when: (1) the company does not regularly sell new stock, $S = 0$, or (2) the new stock is sold at a price that equals book value, $V = 0$.

In calculating the sustainable growth rate, g, in this testimony, the S and V terms were calculated for the comparable group of companies as follows:

$$V = 1 - \left(\frac{BVPS}{P_{stock}}\right) \tag{7.4}$$

where:

P_{stock} = closing stock price

$BVPS$ = 1995 year-end book value per share

and,

$$S = \frac{Issuance_t}{CEQ_{t-1}} \tag{7.5}$$

where:

$Issuance_t$ = net proceeds the issuance of common stock in time period, t

CEQ_{t-1} = total common equity in previous time period, t-1

An average S from 1992-1996 was multiplied by V. This product was then added to $B*R$ to yield g, the sustainable growth rate.

Note: See Roger A. Morin, *Utilities' Cost of Capital*, (Arlington, Virginia: Public Utilties Reports, Inc., 1984), 99-102, for a full discussion of the DCF model considering external financing.

Data from *Utility Compustat II*, Standard & Poor's Compustat Services, Inc. was used for the calculation of S and V.

Duquesne Light Company
Sustainable Growth, Comparable Group of Companies

Company	R Estimated Return on Common Equity [1]	D_e Estimated Dividend [2]	V_e Estimated Book Equity [2]	V Book Equity Per Share 1996	V Book Equity Per Share 1995	R_{av} Return on Average Equity [3]	B [4]	B*R [5]	Average S*V [6]	B*R+S*V
	(Percent)	(Dollars)				(Percent)				
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Carolina Power & Light Co.	13.0 %	$ 2.14	$ 22.20	$ 17.77	$ 16.93	13.32 %	27.60 %	3.68 %	-1.06 %	2.61 %
Central and South West Corp.	10.5	1.74	19.75	17.98	16.48	10.96	19.59	2.15	1.13	3.28
Cinergy Corp.	13.5	1.98	20.75	16.39	16.17	13.59	29.80	4.05	2.18	6.23
DTE Energy Co.	11.5	2.10	27.25	23.69	23.62	11.52	33.09	3.81	-0.07	3.74
Eastern Utilities Associates	10.0	1.55	19.20	18.19	18.36	9.95	18.90	1.88	-0.21	1.67
Empire District Electric Co.	12.5	1.28	14.85	12.96	12.69	12.63	31.76	4.01	1.81	5.82
GPU, Inc.	11.5	2.20	32.50	25.27	24.70	11.63	41.80	4.86	0.57	5.43
Green Mountain Power Corp.	10.0	1.48	25.95	22.22	22.01	10.05	43.23	4.34	0.32	4.67
Idaho Power Co.	11.5	1.90	21.00	18.47	18.15	11.60	21.99	2.55	1.26	3.81
KU Energy Corp.	12.5	1.92	19.50	17.07	16.62	12.67	22.26	2.82	0.00	2.82
Minnesota Power & Light Co.	11.5	2.10	21.75	18.65	18.56	11.53	16.24	1.87	1.05	2.92
Nevada Power Co.	10.5	1.60	17.65	16.40	16.25	10.55	14.06	1.48	2.30	3.78
OGE Energy Corp.	13.0	2.70	27.50	23.81	23.22	13.16	25.42	3.35	0.00	3.35
PECO Energy Co.	11.0	1.84	23.70	20.87	20.39	11.13	30.23	3.36	0.04	3.40
PP&L Resources, Inc.	11.0	1.67	19.00	16.88	16.29	11.19	21.47	2.40	0.47	2.87
St. Joseph Light & Power Co.	12.5	1.10	13.30	10.87	20.84	8.57	3.51	0.30	0.16	0.46
United Illuminating Co.	11.0	2.88	32.50	31.20	31.20	11.00	19.44	2.14	0.00	2.14
	11.6 %	$ 1.89	$ 22.26	$ 19.33	$ 19.56	11.47 %	24.73 %	2.89 %	0.59 %	3.47 %

[1] 2000-20002 estimate.
[2] 2000-2002 estimated per share dividends and book value.
[3] $R_{av}=(2*R*V_{96})/(V_{96}+V_{95})$.
[4] $B=1-(D_e/(R_{av}*V_e))$.
[5] $B*R=B*R_{av}=(R_{av}-D_e/V_e)$.
[6] S*V equals five year average of S, multiplied by current V, where S = annual growth rate of common shares outstanding and V = fraction of new funds provided that accrues to original shareholders.

Sources: *Utility Compustat II,* Standard & Poor's Compustat Services, Inc.
The Value Line, Investment Survey, Edition 1, June 13; 1997, Edition 5, April 11, 1997 and Edition 11, May 23, 1997.

Duquesne Light Company
S and V Data, Comparable Group of Companies

Company	S							
	1992	1993	1994	1995	1996	Average S[1]	V[2]	S*V
	(a)	(b)	(c)	(d)	(e)	(f)	(g)	[(f)*(g)] (h)
Carolina Power & Light Co.	0.0000	0.0000	-0.0414	-0.0486	-0.0107	-0.0201	0.5274	-0.0106
Central and South West Corp.	0.0006	0.0000	0.0163	0.0177	0.1426	0.0354	0.3192	0.0113
Cinergy Corp.	0.0247	0.0252	0.1393	0.0237	0.0001	0.0426	0.5120	0.0218
DTE Energy Co.	0.0000	0.0000	-0.0173	0.0000	0.0000	-0.0035	0.1935	-0.0007
Eastern Utilities Associates	0.0334	0.1649	0.0272	0.0156	0.0000	0.0482	-0.0440	-0.0021
Empire District Electric Co.	0.0340	0.0323	0.0257	0.1106	0.0993	0.0604	0.2990	0.0181
GPU, Inc.	0.0000	0.0514	0.0000	0.0582	0.0000	0.0219	0.2605	0.0057
Green Mountain Power Corp.	0.0347	0.0418	0.0359	0.0413	0.0414	0.0390	0.0830	0.0032
Idaho Power Co.	0.0921	0.0407	0.0192	0.0000	0.0000	0.0304	0.4144	0.0126
KU Energy Corp.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.4567	0.0000
Minnesota Power & Light Co.	-0.0014	0.1120	0.0017	0.0109	0.0309	0.0308	0.3411	0.0105
Nevada Power Co.	0.1611	0.1915	0.1115	0.0433	0.0465	0.1108	0.2077	0.0230
OGE Energy Corp.	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.4422	0.0000
PECO Energy Co.	0.0030	0.0069	0.0005	0.0034	0.0024	0.0033	0.1105	0.0004
PP&L Resources, Inc.	0.0025	0.0027	0.0273	0.0312	0.0282	0.0184	0.2548	0.0047
St. Joseph Light & Power Co.	-0.0059	0.0008	-0.0354	-0.0006	0.0160	-0.0050	-0.3171	0.0016
United Illuminating Co.	0.0081	0.0041	0.0002	0.0010	0.0001	0.0027	0.0023	0.0000
						0.0244	0.2390	0.0059

[1] Average of five most recent years.
[2] V = (1-(1995 Book Value per Share/Average Stock Price)).

Sources: *Utility Compustat II,* Standard & Poor's Compustat Services, Inc.
Factset Security Price History Report.

Duquesne Light Company
EPS Growth Estimate

Company	EPS 1996	EPS 2000-2002 Estimated	Estimated Growth [1]
	(Dollars)	(Dollars)	(Percent)
	(a)	(b)	(c)
Carolina Power & Light Co.	$ 2.66	$ 3.10	3.11 %
Central and South West Corp.	1.43	2.00	6.94
Cinergy Corp.	2.12	2.80	5.72
DTE Energy Co.	2.13	3.25	8.82
Eastern Utilities Associates	1.50	1.90	4.84
Empire District Electric Co.	1.23	1.70	6.69
GPU, Inc.	2.47	3.75	8.71
Green Mountain Power Corp.	2.22	2.55	2.81
Idaho Power Co.	2.21	2.45	2.08
KU Energy Corp.	2.17	2.50	2.87
Minnesota Power & Light Co.	2.28	2.75	3.82
Nevada Power Co.	1.56	1.85	3.47
OGE Energy Corp.	3.25	3.50	1.49
PECO Energy Co.	2.24	2.55	2.63
PP&L Resources, Inc.	2.05	2.10	0.48
St. Joseph Light & Power Co.	1.32	1.65	4.56
United Illuminating Co.	2.88	3.55	4.27
	$ 2.10	$ 2.59	4.31 %

[1] Growth equals [(2000-2002 estimate/1996 actual)^0.20]-1.

Sources: *Utility Compustat II,* Standard & Poor's Compustat Services, Inc.
The Value Line, Investment Survey, Edition 1, June 13, 1997; Edition 5, April 11, 1997 and Edition 11, May 23, 1997.

Duquesne Light Company
Selling and Issuance Cost Evidence

	Public Offering Amount	Underwriter's Discount	Direct Costs	Total Costs	Selling and Issuance Cost
	(Dollars)				(Percent)
	(a)	(b)	(c)	(d)	[(d)/(a)] (e)
8-Nov-79	$ 53,200,000	$ 2,470,000	$ 190,000	$ 2,660,000	5.00 %
12-May-80	59,000,000	2,060,000	180,000	2,240,000	3.80
22-Sep-81	49,500,000	2,060,000	176,000	2,236,000	4.52
Average	$ 53,900,000	$ 2,196,667	$ 182,000	$ 2,378,667	4.44 %

Source: Docket No. R-821945, Duquesne Exhibit No. 12A, Schedule 12, page 4 of 14.

Past Electric Utility Rate Decisions
1995-1997

Exhibit JDM - 12

Date	Utility	ROE	Distribution Point	Frequency
4/17/95	Cleveland Elec. Illum. (OH)	12.59	10.20	-
4/17/95	Toledo Edison (OH)	12.59	10.70	2
4/27/95	Central Louisiana Electric (LA)	12.25 (1)	11.20	5
5/15/95	PSI Energy (IN)	11.00 (2)	11.70	7
5/25/95	Orange & Rockland Utilities (NY)	10.40	12.20	4
6/1/95	Northern States Pwr (WI)	11.30	12.70	3
6/12/95	Union Electric (MO)	13.30 (3)	13.20	-
7/10/95	South Carolina Elec. & Gas (SC)	12.00	13.70	-
7/28/95	Rochester Gas & Electric (NY)	11.20		
9/15/95	Green Mountain Power (VT)	11.25 (4)		
9/21/95	Montana Power (MT)	11.00		
10/17/95	Central Vermont Public Service (VT)	11.00		
11/8/95	PacifiCorp (WA)	11.25		
12/5/95	Arizona Public Service (AZ)	11.25 (5)		
3/15/96	Northern States Power (WI)	11.30		
3/27/96	United Illuminating (CT)	11.50		
8/2/96	Nantahala Power & Light (NC)	11.00 (4)		
10/15/96	MidAmerican Energy (IL)	11.75		
1/3/97	Citizens Utilities (AZ)	10.70		
2/13/97	Wisconsin Electric Power (WI)	11.80		
2/20/97	Wisconsin Public Service (WI)	11.80		
3/6/97	Wisconsin Power and Light (WI)	11.70		
3/31/97	Central Power and Light (TX)	10.90		
Average		11.51		
Median		11.30		

Notes: The following decisions did not include a provision for ROE

Black Hills P&L (SD)	2/1/95
Empire District Elec. (MO)	3/17/95
Entergy Gulf States (LA)	5/31/95
Tuscon Electric Power (AZ)	6/13/95
Kansas Gas & Electric (KN)	8/17/95
Kansas Power & Light (KN)	8/17/95
PacifiCorp (OR)	9/1/95
U.G.I. Corporation	1/26/96
Entergy Louisiana (LA)	4/15/96
Kansas City Pwr. & Lt. (MO)	5/28/96
American Electric Power West Virgina (WV	6/8/96
Entergy New Orleans (LA)	1/9/97
OG&E Electric Services (OK)	1/23/97
Centerior Energy (OH)	1/30/97
Puget Sound Energy (WA)	2/5/97
GPU Energy (NJ)	3/24/97

(1 Includes rate stabilization plan that caps earnings for 5 years, but allows for an equal sharing of earnings between a 12.25% and 13% ROE.
(2 Company may retain earnings up to a 12% ROE.
(3 ROE capped at 13.3%.
(4 Estimated.
(5 Order followed stipulation or settlement by the parties. Decision particulars not necessarily precedent-setting or specifically adopted by the regulatory body.

Sources: REGULATORY FOCUS, Regulatory Research Associates, Inc. "Major Rate Case Decisions – January-March 1997," and "Major Rate Case Decisions--January 1985-December 1996."

DUQUESNE LIGHT COMPANY

MARKET-TO-BOOK RATIOS IN EXCESS OF 1.0 SHOULD BE EXPECTED FOR REGULATED UTILITIES

This Exhibit introduces a model to examine and explain some of the factors that affect a company's market-to-book ratio. The model illustrates why it is normal for the market-to-book ratio to differ from 1.0. It shows in particular why, in periods of low inflation, a ratio in excess of 1.0 should be expected. I start from a "Fama-French" model, modifying and simplifying it for the specific case of a regulated utility.[1] This model sets the market value of a company as the discounted stream of expected future dividends. My basic model is simplified, considering an all-equity utility that finances its investments through retained earnings. Later in this Exhibit, I relax some of these conditions in order to investigate the effects on the market-to-book ratio.

A. The Basics of the Model

Dividends in each year t are represented by:

$$D_t = EI_t + DP_t - I_t \quad (1)$$

where EI_t is equity income, DP_t is depreciation and I_t is investment outlays. Equity income is earnings before extraordinary items but after depreciation, taxes and interest. Using accounting principles (assuming that there is no preferred stock):

$$EI_t = REV_t - C_t - DP_t - T_t \quad (2)$$

where REV_t are revenues, C_t are costs and T_t are taxes. Furthermore, we can separate revenues and costs into their regulated and unregulated parts:

---

[1] For further reference, see: Fama, Eugene F. and Kenneth R. French, "Size and Book-to-Market Factors in Earnings and Returns," *Journal of Finance,* Vol. L, No. 1, March 1995.

$$(3) \qquad REV_t = REV_t^R + REV_t^U; and$$

$$C_t = C_t^R + C_t^U$$

where an R superscript denotes regulated and a U superscript denotes unregulated. Finally, we can define revenues for a certain category l (regulated or unregulated) as:

$$(4) \qquad REV_t^l = \sum_{h=1}^{j} p_{h,t}^l \bullet q_{h,t}^l$$

where a subscript h indicates a particular service (for j available services), p represents the price, and q quantity.

For any year $t+i$, expected dividends are:

$$(5) \qquad E_t D_{t+i} = E_t\left[EI_{t+i} + DP_{t+i} - I_{t+i}\right]$$

Define ρ_t as the cost of capital in period t; ρ_t is the one-period interest rate in period t under certainty. Therefore, the discount rate to be used at period T is:

$$(6) \qquad R_T = \prod_{\tau=1}^{T}(1+\rho_\tau)$$

The value of the firm's market equity at t is:

$$(7) \qquad ME_t = \sum_{i=1}^{\infty} E_t\left(\frac{EI_{t+i} + DP_{t+i} - I_{t+i}}{R_i}\right)$$

and the ratio of market-to-book-equity is:

$$(8) \qquad \frac{ME_t}{BE_t} = \sum_{i=1}^{\infty} E_t\left(\frac{\dfrac{EI_{t+i} + DP_{t+i} - I_{t+i}}{\bullet\, BE_t}}{R_i}\right)$$

where BE_t is book equity at period t.

The model is then defined by equations (2)-(4), and (8).

Regulators and regulated companies determine the permissible revenue requirement in a rate case. The revenue requirement is used to set rates for the regulated services. The revenue requirement for a regulated company is given by:

$$RR_t = C_t^R + r_t \cdot BE_t + DP_t + T_t \tag{9}$$

where T_t is taxes in time t.

This section has developed a model that explains that the market to book ratio depends on a discounted stream of expected cash flows as can be seen in equation (8). The difference between expected revenues and the revenue requirement, is examined in the next section.

B. The Model Under Perfect Foresight

In this section, I further simplify the model presented above by assuming that the regulator can perfectly foresee the future and determine all the variables according to the information available. Also, I assume that there are no unregulated revenues. Additionally, investment outlays and depreciation are assumed to be identical at each period. Therefore, dividends are equal to equity income, and the book value of the regulated company is the same in nominal terms for all periods. Finally, the cost of capital is assumed to be the same at all periods.

Perfect foresight on the part of the regulator eliminates two sources of uncertainty: (1) the allowed rate of return will equal the true cost of capital; and (2) the regulator can set the revenue requirement equal to the expected revenues of the company. In other words, if we define r_t as the allowed rate of return in period t, and $\varepsilon_t = r_t - \rho_t$ as the difference between the allowed rate of return set in advance and the actual cost of capital in period t, then:

$$r_t = \rho_t \Rightarrow \varepsilon_t = 0 \tag{10}$$

and,

$$\sum_{h=1}^{j} p_{h,t}^R \cdot q_{h,t}^R = RR_t \tag{11}$$

Perfect foresight combined with the absence of unregulated revenues and the equality of depreciation and investment outlays removes uncertainty from the model. Plugging (9), (11) and (12) into (2)-(4) and (8):

$$(12) \qquad \frac{ME_t}{BE_t} = \sum_{i=1}^{\infty} \frac{\rho_{t+i}}{\prod_{T=1}^{i}(1+\rho_T)}$$

The right-hand side of equation (12) is an arithmetic series that equals one as a result of the above assumptions and simplifications. That is, equation (12) becomes:

$$(13) \qquad \frac{ME_t}{BE_t} = 1$$

The result shown in equation (13) indicates that under idealized conditions the market-to-book ratio for a regulated company equals one. These idealized conditions include: (1) no unregulated activities; (2) investments equal depreciation for each period; (3) known fixed cost of capital; and (4) a regulator with perfect foresight.

C. Why Market Value Differs from Book Value

Of course, the future cannot be predicted with certainty—the requirement for equation (13) to hold. There are several sources of uncertainty which cause book and market values to differ. This section offers four examples of sources of such uncertainty: unregulated earnings, regulatory lag, growth expectations, and inflation.

1. Unregulated Earnings

Many utilities earn revenues that are not regulated. Duquesne is one of these. So long as these activities are not loss-making (in which case, the utility would not long continue to provide them), the revenue from these services will exceed their costs. Then:

$$(14) \qquad REV_t^U - C_t^u \geq 0$$

The inequality in equation (14) is a component of equity income. Relaxing the model to allow for unregulated business while maintaining all the other assumptions gives:

$$(15) \qquad \frac{ME_t}{BE_t} = 1 + \sum_{i=1}^{\infty} \left[\frac{REV_{t+i}^{U} - C_{t+i}^{U}}{\prod_{T=1}^{i} (1+\rho_T)} \right]$$

The second term in the right-hand side term of equation (15) is positive because of the sign of inequality (14). The market-to-book ratio increases as the result of unregulated services and is greater than 1.0, as we observe from comparing equations (13) and (15).

2. Regulatory Lag

Regulatory lag can be defined as the inability of the administrative process of setting regulated rates to keep up with current events. That is, rates change only as the result of a rate case decision, while costs and the volumes sold for a particular utility can change constantly.

During the interval between rate cases, the utility's earnings depend on its ability to cut costs, increase volumes sold, and generally increase the efficiency of its operations.[2] The variable K_{t+i} of equation (16) shows whether the company profits or loses as the result of regulatory lag.

$$(16) \qquad REV_{t+i}^{R} - C_{t+i}^{R} = K_{t+i}$$

Relaxing the assumption of no regulatory lag in the model of Section I, the market-to-book value is higher than 1.0 when K_{t+i} is positive. In the past, in periods of high inflation, such regulatory lag represented a considerable problem for utilities—consistent with observed market-to-book ratios less than one in the late 1970s and early 1980s. With little or no inflation, however (which is the case at present), increased efficiency and greater productivity in the industry would argue for a positive K_{t+i}. That is to say, while K_{t+i} could be either positive or negative, reflecting opposing forces such as inflation and productivity, the current market should lead us to expect this term to be positive.

---

[2] "Freezing rates for the period of the lag imposes penalties for inefficiency, excessive conservatism, and wrong guesses, and offers rewards for their opposites: companies can for a time keep the higher profits they reap from

(continued...)

3. Growth Expectations

Investors in the market form expectations about the future path of the company. Market value is calculated as a forward-looking process. It entails a forecast about the company's costs in the future, how the market will expand (*e,g*, market penetration) and the impact of future regulatory proceedings, among other factors. Investors make their own assumptions and arrive at a general or specific market value for the utility. These expectations affect all future expected earnings (EI_{t+i}). If the expectations of investors are positive (negative), the market-to-book ratio will be higher (lower) than 1.0. An example of positive expectations is when investors believe that the company can cut costs in the future and increase its efficiency, outperforming the regulator's expectations.

4. Inflation Expectations

The real cost of capital depends in part on the expectations of future inflation. The rate of return set by the regulator incorporates inflationary expectations. At times, the rate of return set by the regulator may have a higher forecasted inflation rate than that currently envisioned by investors—for example, because of a change in policy of the Federal Reserve. As a result, the market changes its valuation of the company, relative to its regulatory book value. If the market cost of capital has dropped (increased) since the allowed rate of return was set, the market value for the company increases (decreases) as does the market-to-book ratio.

D. Summary

Regulated utilities earn their equity income as a function of a regulated cost of capital multiplied by a regulated equity rate base. As such, it is reasonable to question why, with such a regulatory model, the market-to-book ratio is rarely equal to 1.0. If regulators have done their job of setting the cost of capital reasonably accurately, why is this so?

(...continued)

a superior performance and have to suffer the losses from a poor one," Kahn, Alfred (1971): *The Economics of Regulation*, John Wiley & Sons, New York.

The model I present here illustrates some of the principal reasons why market-to-book ratios differ from 1.0. First, it shows that the market-to-book ratio equals one only in the case of: (1) a regulator who is perfectly able to predict the future, (2) a utility with no unregulated segments that (3) invests the same amount that is depreciated each period in a market with (4) a known fixed cost of capital. These conditions, however, do not always (or indeed often) hold. Unregulated earnings (which for many utilities like Duquesne are a growing part of total earnings), regulatory lag (which in low inflation periods favors utilities) and growth expectations are all factors that will drive a wedge between market values and book values. In the current market environment, we should expect this wedge to drive market values above book values (which is what we observe in the market for utility common stock).

Internal Rate of Return
Comparison of Findings

	NERA		
	1972 - 1996	1972 - 1992	NARUC [1]
	(Percent)		
	(a)	(b)	(c)
DQE	8.40 %	7.78 %	11.92 %
Electric Utilities	9.44	9.51	14.19
S&P Utilities	11.19	10.99	nr
S&P Industrials	10.49	10.20	12.95

nr not reported

[1] Calculated as an average of returns for 171 holding periods.

Sources: *Utility Compustat II,* Standard & Poor's Compustat Services, Inc.
Electric and Telephone Utility Stockholder Returns: 1972 - 1992, National Association of Regulatory Utility Commissioners, September 13, 1993.
Analysts' Handbook, Standard & Poor's, 1996.

Internal Rate of Return of Electric Utilities
1972 - 1996 and 1972 - 1992 Holding Periods

	Internal Rate of Return	
	1972 - 1996	1972 - 1992
	(Percent)	
	(a)	(b)
ALLEGHENY POWER SYSTEM	11.05 %	10.81 %
AMERICAN ELECTRIC POWER	8.37	7.97
ATLANTIC ENERGY INC	9.96	10.54
BALTIMORE GAS & ELECTRIC	10.76	10.64
BANGOR HYDRO-ELEC CO	7.54	8.44
BOSTON EDISON CO	8.42	8.47
CAROLINA POWER & LIGHT	9.68	9.22
CENTRAL & SOUTH WEST CORP	9.18	9.44
CENTRAL HUDSON GAS & ELEC	9.17	9.20
CENTRAL MAINE POWER CO	7.81	8.73
CILCORP INC	8.62	8.60
CIPSCO INC	9.51	9.10
CMS ENERGY CORP	5.24	4.02
COMMONWEALTH ENERGY SYSTEM	11.55	11.49
CONSOLIDATED EDISON OF NY	13.79	14.28
DELMARVA POWER & LIGHT	10.02	10.29
DOMINION RESOURCES INC	9.04	9.07
DPL INC	9.49	9.07
DQE INC	8.40	7.78
DTE ENERGY CO	6.09	4.71
DUKE POWER CO	11.74	11.51
EASTERN UTILITIES ASSOC	7.98	8.31
EDISON INTERNATIONAL	9.69	8.62
EL PASO ELECTRIC CO	4.46	4.63
EMPIRE DISTRICT ELECTRIC CO	9.87	10.68
ENTERGY CORP	5.69	5.87
FLORIDA PROGRESS CORP	8.95	8.93
FPL GROUP INC	9.22	8.95
GPU INC	8.80	8.33
HAWAIIAN ELECTRIC INDS	10.69	11.31
HOUSTON INDUSTRIES INC	6.54	6.35
IES INDUSTRIES INC	9.66	9.76
ILLINOVA CORP	6.02	5.75
INTERSTATE POWER CO	9.67	9.95

Internal Rate of Return of Electric Utilities
1972 - 1996 and 1972 - 1992 Holding Periods

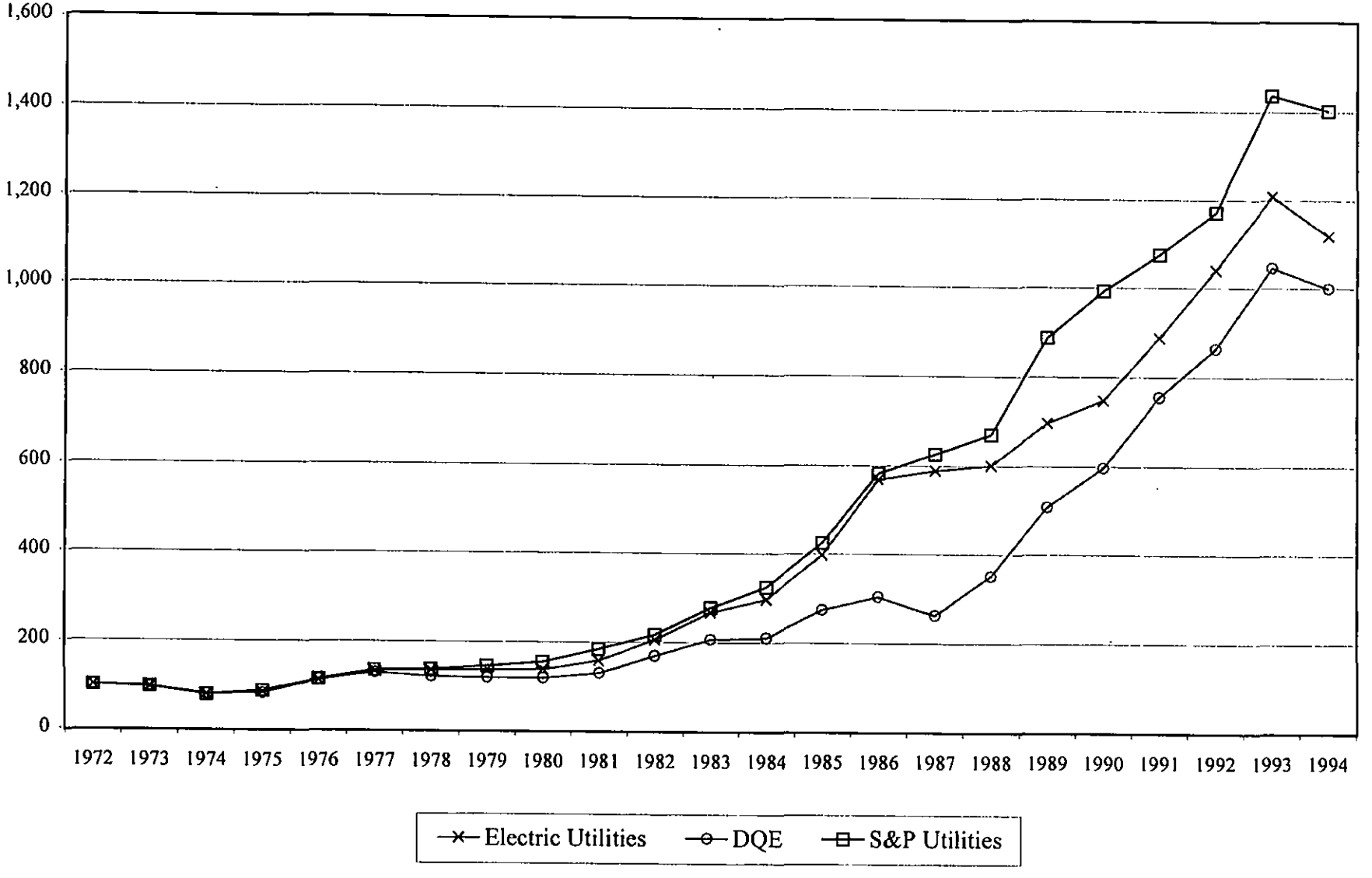
	Internal Rate of Return	
	1972 - 1996	1972 - 1992
	(Percent)	
	(a)	(b)
IPALCO ENTERPRISES INC	10.61	10.68
KANSAS CITY POWER & LIGHT	10.55	10.49
KU ENERGY CORP	9.97	10.09
LG&E ENERGY CORP	8.16	7.51
LONG ISLAND LIGHTING	5.66	5.97
MDU RESOURCES GROUP INC	11.82	11.66
MINNESOTA POWER & LIGHT	11.58	12.32
MONTANA POWER CO	7.65	8.16
NEVADA POWER CO	10.07	10.20
NEW ENGLAND ELECTRIC SYSTEM	11.88	12.19
NEW YORK STATE ELEC & GAS	9.19	9.73
NIAGARA MOHAWK POWER	7.36	8.72
NIPSCO INDUSTRIES INC	6.01	4.82
NORTHEAST UTILITIES	8.56	9.27
NORTHERN STATES POWER/MN	11.87	12.03
OGE ENERGY CORP	7.96	7.83
OHIO EDISON CO	7.73	7.71
ORANGE & ROCKLAND UTILITIES	10.51	10.89
OTTER TAIL POWER CO	11.99	12.50
PACIFICORP	9.56	9.97
PECO ENERGY CO	8.38	8.32
PG&E CORP	9.57	10.42
PINNACLE WEST CAPITAL	8.57	8.14
PORTLAND GENERAL CORP	8.79	7.53
POTOMAC ELECTRIC POWER	12.11	12.54
PP&L RESOURCES INC	10.07	10.55
PUBLIC SERVICE CO OF COLO	8.64	8.15
PUBLIC SERVICE CO OF N MEX	6.96	6.61
PUBLIC SERVICE ENTRP	10.07	10.21
PUGET SOUND ENERGY INC	10.05	10.37
ROCHESTER GAS & ELECTRIC	8.88	9.11
SCANA CORP	9.69	9.38
SIERRA PACIFIC RES	8.76	8.61
SIGCORP INC	13.06	13.67

Internal Rate of Return of Electric Utilities
1972 - 1996 and 1972 - 1992 Holding Periods

	Internal Rate of Return	
	1972 - 1996	1972 - 1992
	(Percent)	
	(a)	(b)
SOUTHERN CO	9.80	9.39
SOUTHWESTERN PUBLIC SVC CO	11.92	12.21
ST JOSEPH LIGHT & POWER	10.92	11.44
TECO ENERGY INC	11.09	11.07
TEXAS UTILITIES CO	6.90	6.81
TUCSON ELECTRIC POWER CO	9.32	9.68
UNICOM CORP	6.94	7.13
UNION ELECTRIC CO	10.21	10.23
UNITED ILLUMINATING CO	8.57	8.77
UTILICORP UNITED INC	14.06	14.55
WASHINGTON WATER POWER	10.04	10.10
WESTERN RESOURCES INC	10.06	10.15
WISCONSIN ENERGY CORP	14.09	14.69
WPL HOLDINGS INC	11.68	12.38
WPS RESOURCES CORP	13.07	13.49
Average	9.44 %	9.51 %

Sources: *Utility Compustat II,* Standard & Poor's Compustat Services, Inc.
Electric and Telephone Utility Stockholder Returns: 1972 - 1992, National Association of Regulatory Utility Commissioners, September 13, 1993.

DQE, Electric Utilities and S&P Utilities Indices
Total Shareholder Returns
1972 - 1994



Sources: *Utility Compustat II*, Standard & Poor's Compustat Services, Inc.
Analysts' Handbook, Standard & Poor's, 1996.

DQE, Electric Utilities and S&P Utilities Indices
Total Shareholder Returns
1972 - 1994

	Electric Utilities (a)	DQE (b)	S&P Utilities (c)
1972	100	100	100
1973	95	95	96
1974	78	79	78
1975	84	81	87
1976	111	113	114
1977	133	130	136
1978	136	121	138
1979	137	119	146
1980	138	119	156
1981	159	130	185
1982	206	170	217
1983	267	207	278
1984	297	211	324
1985	398	274	425
1986	568	304	582
1987	589	263	627
1988	601	351	671
1989	698	507	887
1990	748	597	992
1991	887	755	1,074
1992	1,040	863	1,172
1993	1,209	1,046	1,436
1994	1,118	1,000	1,403

Sources: *Utility Compustat II,* Standard & Poor's Compustat Services, Inc.
Analysts' Handbook, Standard & Poor's, 1996.

VOLUME IV

Duquesne Statement No. 13

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

DUQUESNE LIGHT COMPANY
DOCKET NO. R-00974104

Direct Testimony
of
Thomas LaGuardia

Contents:

Regarding Fossil and Nuclear Decommissioning Costs.

DIRECT TESTIMONY OF THOMAS S. LAGUARDIA

I. QUALIFICATIONS

Q. Please state your name and business address.

A. Thomas S. LaGuardia, 148 New Milford Road East, Bridgewater, CT 06752

Q. What is your occupation?

A. I am President of TLG Services, Inc. (TLG)

Q. What are your responsibilities with TLG?

A. I am responsible for the technical and business management of engineering and field services in the areas of decontamination, decommissioning, waste management and general engineering for nuclear and fossil-fueled generating stations.

Q. What is your educational and professional background?

A. I completed my Bachelor of Science in Mechanical Engineering at Polytechnic Institute of Brooklyn in 1962 and my Master of Science in Mechanical Engineering at the University of Connecticut in 1968. I am a registered Professional Engineer in Connecticut (No. 10393), New York (No. 059389) and New Jersey (No. 38193). I have been actively conducting business as TLG since January 1, 1994. TLG acquired certain operating assets on January 1, 1994 from TLG Engineering, Inc. I founded

TLG Engineering in April, 1982. I was employed by Nuclear Energy Services in Danbury, Connecticut, from 1973 until I founded TLG Engineering. My prior employment was with Gulf Nuclear Fuels Corporation, formerly United Nuclear Corporation (UNC), and Combustion Engineering.

II. PURPOSE AND SCOPE

Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony is two-fold. First, I will present the results of the decommissioning cost studies prepared by TLG for the Beaver Valley Power Station, Units 1 and 2 (Beaver Valley), and the Perry Nuclear Power Plant Unit 1 (Perry). The primary objective in preparing these studies was to develop accurate cost estimates to decommission the nuclear units. This will allow the owners to verify the adequacy of current funding levels and, if necessary, adjust contributions to reflect current cost projections. The studies are not detailed decommissioning engineering plans and, therefore, do not commit the owners to a specific course of action for the stations following the ultimate cessation of operations.

Second, I am presenting the results of dismantling cost studies prepared by TLG for the following fossil-fueled power plants:

Station	No. of Units	Megawatts (per unit)
Cheswick	1	570 MWe
Elrama 1,2	2	100 MWe
Elrama 3	1	112 MWe
Elrama 4	1	175 MWe
Bruce Mansfield	3	825 MWe
East Lake 5	1	800 MWe
W.H. Sammis 7	1	650 MWe
Brunot Island CTs	3	25 MWe
Brunot Island CTs	3	59 MWe
Brunot Island steam	1	144 MWe

Q. What is covered by the term "decommissioning" as used with reference to the Duquesne Light generating stations?

A. Decommissioning is the planned and orderly retirement of a generating station. In the case of nuclear plant decommissioning, it requires the complete removal and controlled disposal of radioactive materials to levels prescribed by the U.S. Nuclear Regulatory Commission (NRC) and termination of the NRC license(s). The owner may then dismantle the remaining non-contaminated systems and structures. In the case of a fossil-fueled power plant, upon retirement the facility may either be rendered safe indefinitely (through on-going maintenance, repair and security measures) or dismantled. A specific discussion of public safety and dismantling is

included later in this testimony.

Q. Please summarize the costs identified in the nuclear decommissioning and fossil dismantling studies.

A. Decommissioning of the two nuclear units at Beaver Valley was estimated to cost approximately $727.7 million (in 1997 dollars). Decommissioning of the Perry nuclear unit was estimated to cost at least $650 million (in 1997 dollars). The studies assume that the units will complete their fully licensed operating lives and that the stations will be completely dismantled following the removal of radioactivity. Low-level radioactive wastes were destined for the operating Barnwell Low-Level Radioactive Waste Management Facility located in South Carolina due to the uncertainties associated with the availability of both the Midwest and Appalachian Compacts. High-level waste (spent fuel) was assumed to be stored on-site until the transfer to the Department of Energy's (DOE) geologic repository could be completed.

Dismantling and demolishing of the aforementioned fossil-fired steam electric generating stations was estimated to cost approximately $274.4 million (1997 dollars). The fossil estimates address 17 units at the six sites and included the razing of site structures to grade. Each site was decommissioned upon the cessation of the final unit's operation. A credit was included for the potential value of the scrap steel and copper generated in the dismantling process.

III. EXPERIENCE

Q. Do you have experience in the design and construction of fossil-fueled generating stations?

A. Yes. During my employment with Combustion Engineering, Inc. from 1962 to 1968, I was a boiler design, performance and construction engineer for 500 megawatt electric (MWe) coal-fired power boilers and merchant and Naval oil-fired marine boilers.

Q. What decommissioning experience do you have?

A. My decommissioning experience began as site representative for UNC during the BONUS reactor decommissioning in 1969 and 1970. BONUS was a 17 MWe demonstration power reactor located in Puerto Rico that was owned by the U.S. Atomic Energy Commission (USAEC), now the U.S. Department of Energy (USDOE), and operated by the Puerto Rico Water Resources Authority. It was the largest reactor decommissioned by entombment up to that time. The program involved extensive chemical decontamination of radioactive systems, selective piping and component removal, and entombment of the reactor vessel within a massive concrete barrier. The entombment has a design life of 125 years. My role as site representative was to act as a technical liaison and provide project engineering and schedule management assistance during system decontamination, component removal, vessel entombment and facility close-out.

Following the BONUS program, I was lead engineer for UNC during the Elk River Reactor decommissioning between 1970 - 1973. Elk River was a 20 MWe demonstration power reactor located in the state of Minnesota that was owned by the USAEC and operated by United Power Association. Elk River was decommissioned by complete dismantling. The program involved segmentation of the reactor vessel and internals using remotely-operated cutting torches, as well as the packaging, shipping and controlled burial of the segments. Similarly, radioactive piping and components were removed, packaged, shipped and buried. Radioactive concrete was demolished by controlled blasting, and nonradioactive concrete was demolished by wrecking ball to completely dismantle the facility. Initially, my role for UNC was Consulting Engineer and later Lead Engineer for UNC technical support for on-site activities.

I was Project Engineer, while at Nuclear Energy Services, for the detailed engineering and planning of the Shippingport Station Decommissioning Project from 1979 - 1982. Shippingport was a 72 MWe light water breeder reactor located in the state of Pennsylvania, owned by the USDOE and operated by Duquesne Light. The facility is now dismantled, and TLG Engineering, with its joint venture partner, Cleveland Wrecking Company, dismantled all of the clean and contaminated piping and components and removed contaminated concrete. My role for TLG/Cleveland was Project Director, and I selected and managed an on-site project management team to

hire and supervise work crews to accomplish the dismantling. All work was completed on schedule and within budget.

I also assisted Atomic Energy of Canada, Ltd. in the detailed engineering and planning for the decommissioning of the 238 MWe Gentilly Unit 1 reactor located in Three Rivers, Canada. My role was to provide overall decommissioning consulting services and detailed cost estimation of alternatives.

TLG Engineering worked with the Northern States Power Company between 1988-89 in the preparation of the decommissioning plan for the Pathfinder Atomic Power Plant. Pathfinder, located in Sioux Falls, S.D., was a 60 MWe reactor initially placed in a safe storage condition (SAFSTOR) after an abbreviated operating life. TLG Engineering prepared detailed cost and schedule estimates and vessel activation estimates, analyzed the reactor vessel to be used as its own shipping container, and prepared the decommissioning plan in support of plant decommissioning.

TLG Engineering has also assisted the Sacramento Municipal Utility District since 1989 with the decommissioning planning for the Rancho Seco Nuclear Generating Station. This work included a detailed reactor vessel activation analysis, preparation of decommissioning alternative cost and schedule estimates, and assistance with the preparation of the decommissioning plan originally using the SAFSTOR method and more recently reflecting the DECON method.

TLG Engineering worked with the Long Island Lighting Company in the planning for the decommissioning of the Shoreham Nuclear Power Station. This work included the preparation of a detailed reactor vessel activation analysis, cost estimates, schedules, management organization, waste volume estimates and draft decommissioning plan.

In 1990, TLG Engineering was selected by Cintichem, Inc. (a subsidiary of Hoffman-LaRoche) as Decommissioning Co-Manager of a 10 megawatt thermal (MWt) research reactor and associated hot cells and facilities. TLG's staff prepared a reactor core activation analysis as well as cost and schedule estimates for the project. TLG Engineering assisted in the preparation of the decommissioning plan, which has received NRC approval. TLG's field management staff has been on-site assisting in the project management and supervision of the work crews in decommissioning and dismantling the facility. The program is essentially complete. My role in the project was Senior Decontamination and Decommissioning Expert on the Nuclear Safeguards Committee.

TLG has also been involved in the engineering and planning activities associated with the decommissioning of the Yankee Rowe, Trojan and Big Rock Point nuclear units. This work includes activation analyses, preparation of decommissioning alternative cost and schedule estimates, and assistance with the preparation of the decommissioning plans. In addition, TLG was selected to prepare the steam generators and the pressurizer at Trojan for transport to the burial facility at Richland,

WA. TLG was responsible for certifying package integrity, overseeing the grouting of the components and preparing any supporting transportation analyses. The project was successfully completed in October 1995. TLG is currently supporting Portland General Electric (PGE) in the detailed planning required for completing the decontamination and dismantling of the Trojan nuclear unit, including the intact removal and disposal of the reactor vessel and the highly radioactive internal components.

In addition, TLG prepared the decommissioning plan for Dresden Unit 1 and the Environmental Reports (ER) for Dresden Unit 1 and Indian Point Unit 1. Under my supervision and direction, TLG has prepared site-specific decommissioning studies for 80% of the nuclear units in the United States and approximately 150 fossil-fueled units.

TLG was responsible for overseeing the dismantling and demolition of a fossil-fueled steam plant for a major Connecticut hospital facility. In connection with this demolition project, I participated in the site inspection and cost estimate development. The work was subcontracted and TLG personnel supervised the contractors.

Q. Have you prepared or co-authored any studies and reports on decommissioning cost estimating and technology?

A. Yes. While at Nuclear Energy Services, I was Principal Investigator for the Atomic

Industrial Forum's National Environmental Studies Project (NESP) decommissioning study entitled "An Engineering Evaluation of Nuclear Power Reactor Decommissioning Alternatives" (AIF/NESP-009). The Atomic Industrial Forum (now NEI) is an industry supported advocate and sponsor of research to promote the advancement of nuclear power. This study evaluated the costs, schedules and environmental impacts of decommissioning 1100 MWe reactors (Pressurized Water Reactors [PWRs], Boiling Water Reactors [BWRs], and High Temperature Gas-Cooled Reactors [HTGRs]).

I also co-authored the "Decommissioning Handbook" for the USDOE. The Handbook reported the state-of-the-art in decommissioning technology (as of 1980), including decontamination, piping and component removal, vessel segmentation, concrete demolition, cost estimating and environmental impacts.

At TLG Engineering, in 1986, I co-authored "Guidelines for Producing Commercial Nuclear Power Plant Decommissioning Cost Estimates" (AIF/NESP-036) for the Atomic Industrial Forum's National Environmental Studies Project. The Guidelines identify the elements of costs to be included in the estimation of decommissioning activities for each of the principal decommissioning alternatives. Specific guidance in cost estimating methodology and reference cost data is provided in this study. The major objective of this study is to provide a basis for consistent cost estimating methodology.

In 1986, TLG Engineering also prepared a study for the NRC, which I co-authored, entitled, "Identification and Evaluation of Facilitation Techniques for Decommissioning Light Water Power Reactors" (published as an NRC contractor report - NUREG/CR-3587). The study evaluated the costs and benefits of techniques to reduce occupational exposure and waste volume from decommissioning.

TLG personnel also authored the paper "How to Determine the Cost of Dismantling a Fossil-Fuel Electric Power Plant" (A. Carlstrom, Cost Engineering Magazine, April, 1989).

Q. Were the decommissioning and dismantling studies prepared for the Duquesne Light generating stations prepared under your direction and supervision?

A. Yes. I developed the basic methodology used by TLG to estimate the costs to dismantle both nuclear and fossil-fueled power plants. I trained my engineering and estimating staff in this methodology.

During the preparation of the cost estimates, I provided guidance and interpretation to the TLG staff on how to estimate specific activities. I reviewed the results of each cost estimate to ensure the results were reasonable and representative of the features of each unit. Finally, I supervised the preparation of the report summarizing the results of the estimates.

Q. What was the basis for the decommissioning studies?

A. The decommissioning studies for the nuclear units were developed using detailed engineering drawings, together with plant description and inventory documents. These drawings and documents were used to identify the general arrangement of the facilities and to estimate building concrete volumes, steel quantities, the numbers and size of components, and the degree of site restoration required.

For the fossil studies, the information available on the Duquesne Light generating units was supplemented with TLG's data base for plants of similar size and type. This provided the basis for estimating the disposition of the components and structural materials addressed in the dismantling of each site.

Because decommissioning is labor-intensive, representative labor rates for the geographical region and for each craft or salaried work group are essential for a meaningful site-specific decommissioning cost estimate. Accordingly, typical craft labor rates and utility salary data were used in the estimate. This type of information is obtained from the utility's existing labor costs for the area/site.

Low-level radioactive waste, for purposes of the cost estimates, was assumed to be shipped to a operating burial facility in Barnwell, South Carolina. Since there is considerable uncertainty as to the availability of the facilities designated for the

Appalachian States and Midwest Compacts, the burial costs for radioactive materials were developed from rate schedules published for the Barnwell Low-Level Radioactive Waste Management Facility, which is a reasonable proxy for shallow land burial.

Q. For purposes of the estimate, when did you assume the units at each site would be dismantled?

A. For the fossil studies, we assumed dismantling would occur upon retirement of the last unit at each site. This approach is reasonable because it would be more difficult and costly to protect the operating units from potential damage when demolishing the retired units. Moreover, the dismantling staff and crew would only have to mobilize and demobilize once for the site instead of each time a unit is retired. Using the same staff and crew would take maximum advantage of the lessons learned as the units are dismantled in sequence.

The nuclear units were assumed to shutdown upon the expiration of their operating licenses. We also assumed that decommissioning activities would be coordinated between the two units at a station (Beaver Valley) to the maximum extent possible.

IV. METHODOLOGY

Q. What methodology was used to prepare the estimates?

A. The methodology used to develop the cost estimates followed the basic approach presented in the AIF/NESP-036 study report, "Guidelines for Producing Commercial Nuclear Power Plant Decommissioning Cost Estimates," and the DOE "Decommissioning Handbook." The basic methodology described in these documents for preparing dismantling estimates is widely accepted by the electric power industry and regulatory agencies throughout the United States, including the NRC, and is applicable for nuclear as well as fossil plants.

Q. How was this methodology applied to the Duquesne Light generating units?

A. The aforementioned references recommend the use of a unit factor method for estimating decommissioning activity costs to standardize the estimating calculations. Unit factors describe the sequence of events required to remove a specific plant or structural component, the labor and material needed to support the activities identified, the impact of expected working conditions on the duration of performance and the associated cost (on a per unit basis). Unit factors for activities such as concrete removal ($/cu yd), steel removal ($/ton), and cutting costs ($/in) were developed from the labor information provided by Duquesne Light. Consumable material and equipment rental costs (crane and truck rental, operating costs for heavy equipment, torch cutting gas consumption, etc.) were taken in large part from R.S. Means, "Building Construction Cost Data," a standard construction industry cost guide. The costs for removal, shipping and disposal were then estimated using the item quantity (cu yds, tons, inches, etc.) developed from plant drawings and inventory

documents. The activity duration critical path for key activities, such as the removal of the nuclear steam supply system, boiler or turbine, were used to determine the total dismantling program schedule.

The program schedule is used to determine the period-dependent costs such as program management, administration, field engineering, equipment rental, and security. The salary and hourly rates are typical for personnel associated with period-dependent costs. In addition, collateral costs were included for heavy equipment rental or purchase, safety equipment and supplies, energy costs, permits, taxes, and insurance.

The activity-dependent, period-dependent, and collateral costs were added to develop the total dismantling costs. A contingency was added to allow for the effect of unpredictable program problems on costs. Such a contingency is appropriate for a project of this size and type, for the reasons explained hereafter. The total dismantling costs plus contingency provide the total project cost. One of the primary objectives of every dismantling program is to protect public health and safety. The cost estimates for the dismantling activities include the necessary planning, engineering and implementation to provide this protection to the public.

Q. Has the NRC approved site-specific cost estimates utilizing TLG's cost estimating methodology?

A. Yes. The NRC has reviewed TLG's cost estimating methodology and is completely familiar with it. TLG prepared decommissioning estimates for inclusion within the decommissioning plans submitted by Northern States Power, New York Power Authority, Sacramento Municipal Utility District, Yankee Atomic Electric Company, Portland General Electric, Southern California Edison and Consumers Power Company for the Pathfinder Atomic Power Station, Shoreham Nuclear Station, the Rancho Seco Nuclear Generating Station, Yankee Nuclear Power Station, Trojan Nuclear Plant, San Onofre Nuclear Generating Station Unit 1 and for the Big Rock Point Plant, respectively. The Decommissioning Plans for each of the units have been approved by the NRC, with the exception of the Big Rock Point submittal, which is still pending.

Q. What are the major differences between nuclear and fossil power plants?

A. The major difference is the radioactivity inherent in nuclear power plants. Removal of radioactively contaminated piping, components and structures from a nuclear plant is more difficult and costly than for comparable items at a fossil plant. The activities of decontaminating, removing, packaging, shipping and burying radioactive materials from a nuclear plant require strict radiological controls, special containments and packaging, and licenses for the transport for disposal. There are many more opportunities for problems to arise in nuclear plant decommissioning than in fossil plants.

Because fossil plants have no radioactivity dismantling them is comparable to reverse construction. There are fewer potential hazards for the worker and, therefore, productivity is higher overall than with nuclear plants and the overall potential for problems is lower.

Q. Does your experience in the decommissioning of nuclear power plants aid in the preparation of a dismantling study for a fossil-fueled power plant?

A. Yes. The parallelism in approach between nuclear plant decommissioning and fossil plant dismantling enables us to rely on the field experience from nuclear decommissioning to prepare fossil plant studies. In particular, the following major areas of planning and estimating exhibit similar characteristics.

1. Site Characterization

The process and planning to identify the composition and extent of radionuclide contamination at nuclear power plants is similar to that required for potentially hazardous materials in fossil-fueled power plants.

2. Sequencing of Work Activities

Identifying systems that are essential or non-essential to the decommissioning task and establishing the sequence for their removal entails the same considerations in both nuclear and fossil plants. Essential systems include electric power, lighting, heating, ventilation and liquid processing systems.

For example, power and lighting would be retained as long as possible to avoid bringing in temporary services prematurely.

3. Management Staff

Identification of utility and decommissioning (dismantling) staffing composition and levels follows the same process in both types of units. The specific job functions will differ but the logic is the same. Management staff costs are period-dependent; that is, they are a function of the overall project duration.

4. Removal of Non-Contaminated Equipment/Structures

Removal of non-contaminated piping, components and structures are activity-dependent. The methods for their removal are identical for most of the systems and structures in each type of plant. Piping diameters and lengths are essentially identical (size-for-size plants), and the removal rate will be the same. Clean components, such as feedwater heaters and pumps, condensate pumps, demineralizer systems, etc., in nuclear plants, are the same sizes and types found in fossil plants. Steel and concrete structures are removed in the same manner in both types of plants. Removal of equipment unique to fossil plants, such as coal handling and air cleaning systems, relates to the weight of sub-components, and is accomplished by rigging and segmentation.

5. Scheduling

The scheduling of work activities for either type of plant follows the proven planning techniques of activity precedence networks and critical path management. An activity precedence network is a flow diagram of sequenced activities based upon the priority or "precedence" of completing one or more activities before starting another activity. The critical path is the longest sequence of work activities in a precedence network from project initiation to completion.

6. Collateral Cost

Collateral costs are neither activity-dependent nor period-dependent costs. They include items such as engineering, energy, licenses, permits, and taxes, etc. These items are identical in both types of plants, although specific cost values will differ.

7. Contingency

Contingency, as described more completely later in this testimony, is a cost allowance for field-related problems that are likely to occur. These problems include, for example, tool and equipment breakdown, late deliveries of supplies and equipment, and adverse weather. These field problems occur in both nuclear and fossil plant dismantling, although the specific allowances differ in each case.

8. Field Experience

The field experience in both nuclear and fossil plant dismantling for clean equipment is essentially the same. Heavy lifts of components weighing 50 to 450 tons are common in both plant types, and the planning and implementation activities are virtually identical.

In summary, nuclear plant decommissioning experience is directly applicable to fossil plant dismantling.

Q. How does this estimating process differ from construction estimating?

A. There is very little difference in the elements of cost between fossil plant dismantling and construction. Both activities must account for labor, materials, equipment, services and collateral costs (as defined earlier). The activities related to construction are similar to those for dismantling. Specifically, construction activities such as rigging components into position and welding connecting piping are comparable to dismantling activities such as cutting connecting piping and rigging components out of the structures. In the case of construction however, the pipe welds must be inspected by non-destructive methods (such as X-Ray examination), and cut out and re-welded if flaws in the weld are identified. This re-work causes schedule delays and incurs additional expense. In the case of dismantling, the pipe need only be cut once. Problems in dismantling occur when plant drawings and specifications do not properly reflect the plant as constructed. This occurs when changes to the plant are

made that have not been recorded on the as-built drawings. This can result in additional dismantling costs. However, in general, fossil dismantling estimating is comparable to construction cost estimating.

V. CONTINGENCY

Q. What is meant by "CONTINGENCY" as used in cost estimating?

A. In simplest terms, "contingency" is equivalent to "experience." Unit costs used to estimate work tend to be ideal numbers that must be adjusted to fit the real world of experience. Professional cost engineers use the term contingency to refer to these predictable costs confirmed through experience.

Q. Is the use of contingency a long established approach to cost estimating?

A. Yes. The NRC standard formula for calculating decommissioning costs (as defined in 10 CFR §50.75 and based upon studies originally prepared by Pacific Northwest Laboratory in 1978-80) provides for such a contingency, and cost engineers routinely include contingency dollars in project cost estimates.

Q. What level of contingency is incorporated within the decommissioning cost estimates relied upon by the NRC for rulemaking?

A. A 25% contingency factor was applied to the costs estimated for decontaminating and dismantling the nuclear units used as model plants in the estimates prepared for the

NRC.

Q. What is the purpose of the contingency?

A. The purpose of the contingency is to allow for the costs of high probability program problems occurring in the field where the occurrence, duration, and severity cannot be accurately predicted and, as a consequence, their associated costs have not been included in the basic estimate. The American Association of Cost Engineers (AACE) (in their Cost Engineers Notebook) defines contingency as follows:

> *Contingency - specific provision for unforeseeable elements of cost within the defined project scope; particularly important where previous experience relating estimates and actual costs has shown that unforeseeable events which will increase costs are likely to occur.*

Past decommissioning experience has shown that unforeseeable elements of cost are likely to occur in the field and may have a cumulative impact. Fossil-fueled and nuclear power plants share some of the same potential problems leading to the need for contingency in cost estimates. These problem areas include:

Schedule slippages:	leading to crew overtime payments and/or project extensions
Weather delays:	loss of productivity, overtime, slippages
Labor strikes:	loss of productivity, slippages
Workers injuries:	production interruptions, additional safety training, workers compensation claims, possible increased insurance premiums
Material shipping:	rescheduling of activities, out-of-scope backcharges from subcontractors

Equipment breakdowns:	rescheduling of activities, out-of-scope backcharges from subcontractors
Regulatory inspections:	insurance inspectors, Occupational Safety and Health Act (OSHA) inspectors, federal and state EPA inspectors, state building inspectors
Hazardous materials:	special handling requirements beyond planned requirements

Nuclear power plants additionally have to deal with the special handling requirements of radioactive materials for decontamination, removal, packaging, shipping and disposal. A more extensive discussion of nuclear contingency is included in the AIF/NESP-036 Guidelines Study (Chapter 13) referred to earlier.

In the AIF study, individual contingencies ranged from 10% to 75%, depending on the degree of difficulty judged to be appropriate from our actual decommissioning experience. The overall contingency, when applied to the appropriate components of nuclear plant decommissioning costs, results in an average contingency of up to 25%.

For fossil plant dismantling, the absence of radioactive materials and their attendant potential problems simplifies the dismantling process. Individual activity contingency estimates for fossil-fueled power plants amount to an overall average of approximately 15% contingency. Independent of our preparation of this estimate for Duquesne Light, R.S. Means, "Building Construction Cost Data," suggests that a 15% contingency factor for conventional construction be used:

Q. Is a contingency an integral component of the estimate?

A. Yes. The purpose of a contingency is to provide assurance that sufficient funding is available to accomplish the intended tasks during the decontamination and dismantling process. Contingency funds are expected to be fully expended throughout the program. The contingency allowance is used in estimating decommissioning-related activities regardless of when they are performed, i.e., the contingency, in itself, does not offer protection against evolving costs and would be equally prudent on an estimate being planned in the near term as it would for future work.

Q. What experience does TLG have with the application of contingencies?

A. Contingencies are an integral part of the estimating methods employed by TLG. In addition, the use of a contingency has been recognized by many state regulatory agencies as well as the Federal Energy Regulatory Commission (FERC or Commission) as a valid cost component in decommissioning estimates. Most recently, in Docket No. ER95-1042-000, the Presiding Administrative Law Judge reaffirmed that "Commission policy supports the use of contingencies ... and, consistent with Commission precedent, there is nothing unreasonable about SERI's 21 percent contingency factor [the level requested in the decommissioning cost for the Grand Gulf Nuclear Station]. It is allowed." The use of a contingency has also been approved in estimates submitted before numerous state regulators.

Q. Have you compared estimates and actual costs for decommissioning projects that have been undertaken to date.

A. Yes. Based upon information available, TLG's estimates for recent work performed are on average within 4% of the actual costs reported (including contingency).

Q. Is the variation between estimated and actual costs due to contingency costs?

A. No. The differentials were either the result of modifications in the management of the intended program or savings in disposal costs negotiated by the licensee with the burial facility during the project. Northern States Power (NSP) had originally planned to decommission the Pathfinder facility using a decommissioning contractor. However, the company was able to realize a savings by using surplus personnel from its two operating nuclear stations to manage and perform the required decontamination and dismantling activities. Chem-Nuclear (operator of the Barnwell, South Carolina disposal facility) was awarded the large component removal project at Yankee Rowe. As the operator of one of the only commercially available disposal facilities, disposal cost reductions were not only possible but competitively advantageous in securing larger contracts. Since the contingency, as applied in the TLG's estimates, is not pricing or scope related, the correlation of estimated and actual project costs validates the need for contingency in decommissioning planning.

Q. Pennsylvania Power & Light Company's Pennsylvania base rate proceeding at Docket No. R-00943271 was the Pennsylvania Public Utility Commission's most recent opportunity to review a utility's decommissioning cost estimate prepared by TLG. In that case, did the Commission accept the inclusion of a contingency in the decommissioning expense approved for the Susquehanna Steam Electric Station

(SES)?

A. No. The Pennsylvania Pubic Utility Commission (Pennsylvania PUC) adopted the ALJ's recommendation to disallow the contingency, although for reasons different than those offered by the ALJ. The ALJ characterized the contingency as a "safety factor" that may or may not be required. The Pennsylvania PUC, in its Order and Opinion dated September 27, 1995, equated contingency with the uncertainty in "evolving costs" over the funding lifetime. That is, they assumed that the contingency was included to reflect the forces that would drive increases in basic decommissioning costs in the future. Therefore, they recommended that "periodic cost updates should be substituted for the use of a one-time contingency factor."

Q. Do you agree with the definition of contingency as defined by either the ALJ or Pennsylvania PUC in Docket R-00943271?

A. No. Both the ALJ and the Pennsylvania PUC deviated from the definition and application of contingency as stated within the cost estimates developed by TLG for the Susquehanna SES. The ALJ interpreted contingency as a "safety factor." Rather, contingency funds are an integral part of the base estimate and are expected to be fully expended throughout the program. Absent the contingency, there is a significant probability that sufficient funding would not be available to accomplish the intended tasks. If expenses are accrued on the basis of an estimate without contingency, or from which contingency has been removed, the orderly progression of events in the decommissioning process can be disrupted and the financial success of the project can

be jeopardized.

For example, one of the more technologically challenging tasks in decommissioning a commercial nuclear station is the disposition of the reactor vessel and internal components which have become highly radioactive after a lifetime of exposure to neutrons produced in the reactor core. The removal, segmentation and packaging of these highly radioactive components forms the basis for the critical path (schedule) for decommissioning operations. Cost and schedule are inter-dependent and any deviation in schedule has a significant impact on cost.

Disposition of the reactor vessel internals involves the underwater cutting of the complex components containing millions of curies of radioactive material. Costs are based upon optimum segmentation, handling and packaging scenarios. The schedule is primarily dependent upon the turn-around time for the heavily shielded shipping casks, including preparation, loading and decontamination of the containers for transport. The number of casks required is a function of the pieces generated in the segmentation activity, a value calculated on optimum performance of the tooling employed in cutting the various subassemblies. The risk and uncertainty associated with this task is that the expected optimization may not be achieved, resulting in delays and additional program costs. For this reason, a contingency is included to properly reflect the consequences of the expected inefficiencies in this complex activity, along with related concerns associated with specialty tooling modifications and repairs, field changes, discontinuities in the coordination of plant services,

unexpected conditions, systems failure, water clarity, lighting, computer cutting software corrections, etc. Experience has shown that many of these problem areas have occurred during, and in support of, the reactor vessel segmentation activity. Contingency dollars are an integral part of the total cost to complete this task. Exclusion of this component puts at risk a successful completion of the intended tasks and, potentially, follow-on activities.

The following listing is a composite of activities, assembled from past decommissioning programs, in which contingency dollars were spent to respond to, compensate for, and/or provide adequate funding of decontamination and dismantling tasks.

Incomplete or Changed Conditions:

- Unavailable/incomplete operational history which led to a re-contamination of a work area, as a sealed cubicle incorrectly identified as being non-contaminated, was breached without controls;
- Surface coatings covering contamination that, due to an incomplete characterization, required additional cost and time to remediate;
- Additional decontamination, controlled removal and disposition of previously undetected (although at some sites, suspected) contamination due to enhanced access of formerly inaccessible areas

and components;

- Unrecorded construction modifications, facility upgrades, maintenance, enhancements, etc., which precipitated scheduling delays, more costly removal scenarios, additional costs (e.g., for re-engineering, shoring, structural modifications), and compromised worker safety.

Adverse Working Conditions:

- Lower than expected productivity due to heat exhaustion in underground vaults, resulting in a change in the working hours (shifting to cooler periods of the day) and additional manpower;
- Confined space, low-oxygen environments where supplied air was necessary and additional safety precautions prolonged the time required to perform required tasks;

Maintenance, Repairs and Modifications

- Facility refurbishment required to support site operations, including those needed to provide new site services as well as to maintain the integrity of existing structures;
- Damage control, repair and maintenance from bird fouling of

equipment and controls;

- Building modification, i.e., re-supporting of floors to enhance loading capacity for heavily shielded casks;
- Upgrading onsite roadways to handle heavier and wider loads; roadway rerouting, excavation and reconstruction;
- Requests for additional safety margins by a vendor;
- Requests to analyze accident scenarios beyond those defined by the removal scenario (requested by the NRC to comply with "total scope of regulation");
- Additional collection and processing of site run-off due to disturbance of natural site contours and drainage;
- Concrete coring for removal of embedments and internal conduit, piping and other potentially contaminated material not originally identified;
- Modifications required to respond to higher than expected worker exposure, water clarity, water disassociation and hydrogen generation from high temperature cutting operations;
- Additional waste containers needed to accommodate cutting particulates, inefficient waste geometries and excess material.

Labor

- Turnover of personnel, e.g., craft and health physics. Replacement of labor is costly, involving additional training, badging, medical exams, and associated processing procedures. Recruitment costs are incurred for more experienced personnel and can include relocation and living compensation;
- Additional personnel required to comply with NRC mandates and requests;
- Replacement of personnel due to non-qualification and/or incomplete certification (e.g., welders).

Schedule

- Schedule slippage due to a conflict in required resources, i.e., the licensee was forced into a delay until prior (non-licensee) commitments of outside resources were resolved;
- Weather related delays in the construction of facilities required to support site operations (with compensation for delayed mobilization made to vendor);
- Rejection of material by NRC inspectors, requiring refabrication and causing program delays in activities required to be completed prior to initiating decommissioning operations.

Weather

- Frozen crane hydraulics prior to a major lift;
- Destruction of an exterior asbestos containment enclosure due to violent winds.

Although not included within the application of the contingency, the factors listed below have an equal probability of affecting the cost and performance of the decommissioning program:

- Transition activities and costs: ancillary expenses associated with eliminating up to 80% of the site labor force shortly after the cessation of plant operations. Added cost for worker separation packages throughout the decommissioning program, state mandated retraining and retention incentives for key personnel;
- Delays in approval of the decommissioning plan due to intervention, public participation in local advisory committees, state and local hearings, etc.;
- Regulatory changes, such as those affecting worker health and safety, site release criteria, waste transportation, and waste disposal; and
- Policy decisions altering federal and state commitments, e.g., in the ability to accommodate certain waste forms for disposition, or in the

timetable for such.

These concerns (with the exception of the first, which in some instances can be quantified), are typically addressed in a Risk and Uncertainty analysis against which probabilities are assigned and confidence traded against cost. Other areas addressed in such an analysis would include the probabilities associated with the uncertainties in predicting the costs of goods and services prior to their actual purchase, scope omission and error, escalation, schedule, scope growth, and "Acts-of-God".

Q. How are these uncertainties addressed in decommissioning funding?

A. While uncertainties can be addressed through probabilistic assessment, these areas of uncertainty are more in line with the "evolving costs" referred to by the Pennsylvania PUC. TLG has and continues to address these changes in periodic updates, rather than through the use of *contingency*. However, the opportunity to revisit an estimate and adjust collections may not always be available.

VI. DECOMMISSIONING REGULATIONS

Q. Are there any federal regulations applicable to nuclear plant decommissioning?

A. Yes. The NRC published the Final Rule entitled "General Requirements for Decommissioning Nuclear Facilities" in the Federal Register of June 27, 1988 (53 Fed. Reg. 24018) to establish technical and financial criteria for decommissioning

licensed facilities. The regulations addressed decommissioning planning needs, timing, funding methods, and environmental review requirements with the intent to assure that decommissioning of all licensed facilities would be accomplished in a safe and timely manner and that adequate licensee funds would be available for this purpose. In 1996, the NRC published revisions to the general requirements for decommissioning nuclear power plants. The Commission amended the decommissioning regulations to clarify ambiguities and codify procedures and terminology as a means of enhancing efficiency and uniformity in the decommissioning process. The amendments allow for greater public participation and better define the transitioning process from operations to decommissioning. The decommissioning cost estimates prepared for Duquesne Light's stations fully satisfy the requirements set forth in these regulations.

Q. Describe the decommissioning alternatives delineated in the NRC Rule for nuclear utilities.

A. The supplemental information to the NRC Rule (53 Fed. Reg. 24022-23) describes three decommissioning alternatives as acceptable: DECON (prompt removal/dismantling), SAFSTOR (mothballing) and, under special circumstances, ENTOMB (entombment). They are defined as follows:

> **DECON** is the alternative in which the equipment, structures, and portions of a facility and site containing radioactive contaminants are

removed or decontaminated to a level that permits termination of the license and allows the property to be released for unrestricted use shortly after cessation of operations;

SAFSTOR is the alternative in which the nuclear facility is placed and maintained in a condition that allows the nuclear facility to be safely stored and subsequently decontaminated (deferred decontamination) to levels that permit termination of the license and release for unrestricted use.

ENTOMB is the alternative in which radioactive contaminants are encased in a structurally long-lived material, such as concrete; the entombed structure is appropriately maintained and continued surveillance is carried out until the radioactivity decays to a level permitting termination of the license and unrestricted release of the property.

It should be noted, however, that the NRC provides that delayed decommissioning following initial mothballing or entombment activities should not exceed 60 years, unless it can be shown that a longer period is necessary to protect public health and safety (10 CFR 50.82 (b) (1)). This rule discourages the use of the ENTOMB alternative unless specific advantages can be shown (see 53 Fed. Reg. 24023-24). The presence of long-lived radioisotopes at commercial generating units diminish any

advantage from delay. However, both the DECON and SAFSTOR alternatives are considered reasonable options for decommissioning the Duquesne Light nuclear stations.

Q. Is it necessary to select a specific decommissioning method at this time?

A. No. The actual method or combination of methods selected to decommission the generating units should be based on a detailed economic, engineering and environmental evaluation of the alternatives considering the sites and surroundings at the time of decommissioning and reflecting the latest experience in the decommissioning of similar nuclear power facilities.

Q. What are your recommendations regarding the alternative selection?

A. I recommend that, for planning purposes, decommissioning cost funding be based upon an integrated scenario for the removal of two Beaver Valley units. In this scenario Unit 1 would be placed in safe-storage awaiting the cessation of operations at Unit 2, a period of approximately 11 years. Decommissioning of Unit 1 would then be assimilated within the decontamination and dismantling processes identified for Unit 2 to maximize cost sharing and experience gained in the decommissioning. The relatively short safe-storage period for Unit 1 would minimize system and facility degradation and minimize the effort required to re-configure the plant to support decommissioning operations.

I recommend for the single Perry unit using the DECON alternative. This alternative provides the most reasonable means for terminating the license for the site in the shortest possible time, consistent with the NRC's timeliness objectives. Furthermore, this alternative avoids the long-term costs and commitments associated with the maintenance, surveillance and security requirements of the conventional delayed dismantling alternatives.

The recommended alternatives allows use of the plant's knowledgeable current operating staff, a valuable asset to a well-managed, efficient decommissioning program. All equipment needed to support decommissioning operations such as cranes, ventilation systems and radwaste processing equipment would be fully operational or can be made available without significant expense.

Q. Would you describe the process of decommissioning a nuclear power reactor utilizing the DECON alternative?

A. Yes. The conceptual approach that the NRC has identified in their amended 10 CFR Part 2, 50 and 51 regulations is to divide decommissioning into three phases. Phase I commences with the effective date of permanent cessation of operations and involves the transition of both plant and licensee from reactor operations, i.e., power production to facility de-activation and closure. During Phase I, notification is to be provided to the NRC certifying the permanent cessation of operations and the removal of fuel from the reactor vessel. The licensee would then be prohibited from operating the reactor. Within

two years of notification to cease reactor operations, the licensee must provide a Post-Shutdown Decommissioning Activities Report (PSDAR). This report would provide a description of the licensee's planned decommissioning activities, a corresponding schedule and an estimate of expected costs. The PSDAR should also address whether environmental impacts associated with the proposed decommissioning scenario have already been considered in a previously prepared environmental statement(s). Ninety days after the NRC's receipt of the PSDAR, the licensee can initiate certain decommissioning activities without specific NRC approval, under a modified §50.59 review process. The amended regulations would permit the licensee to expend up to 3% of the generic decommissioning cost for planning, with an additional 20% available following the 90-day waiting period and certification of permanent defueling. Remaining funds would be available to the licensee with submittal of a detailed, site-specific cost estimate.

Phase II as identified by the NRC in its rule, addresses licensed activities during a storage period. The Phase II requirements are applicable to the dormancy phases of deferred decommissioning alternatives, i.e., SAFSTOR and ENTOMB.

Phase III pertains to the activities involved in license termination. The submittal of an application to terminate the license, along with a termination plan, marks the start of this phase. The termination plan should contain a detailed site characterization, i.e., location, type and amount of radioactivity, a description of any remaining dismantling activities

to be accomplished, detailed plans for a final survey and the planned end use of the site. An updated cost-to-complete would be required along with the reporting of any new or altered environmental consequences.

TLG's estimate for DECON addresses Phases I and III in three subperiods, as follows:

Period 1 - Site Preparations: This period begins upon shutdown of the facility and involves site preparations to initiate decommissioning. The reactor would be defueled, with the fuel placed in the spent fuel pool until it is cooled sufficiently to be transferred to DOE or an alternative storage facility. Transportation and disposal of spent fuel at a DOE facility is not considered part of decommissioning, and no costs associated with these activities are included in the decommissioning estimates. However, transportation and disposal can affect the decommissioning schedule due to the presence of such material on-site. The potential impact of these activities on the schedule has been addressed in the study. Wastes remaining from plant operations would be removed from the site, and all systems that are not essential to decommissioning would be isolated and drained.

Period 2 - Decommissioning Operations: This period begins upon NRC acceptance of the PSDAR and the mobilization of the decontamination and dismantling workforce. This phase of the work involves the removal of radioactivity from the site

and concludes with termination of the NRC operating license. The activities in this period include selective decontamination of contaminated systems, e.g., using aggressive chemical solvents to dissolve corrosion films holding radionuclides, thereby reducing radiation levels. Decontamination will reduce personnel exposure and permit workers to operate in the immediate vicinity of most components while cutting and removing them for controlled disposition at a low-level radioactive waste burial facility. Although the on-site decontamination processes are effective for their intended purposes, they are not designed to reduce residual radioactivity to the levels necessary to release the material as clean scrap. Therefore, all contaminated components will have to be removed for controlled burial.

Contaminated piping connecting major components will be cut and removed. Selected major components such as the reactor recirculation pumps, moisture separators and feedwater heaters will then be removed intact and sealed so that they may be shipped as their own containers for disposal. Smaller components, such as sampling system pumps, filters, filter housings, strainers, etc., will be loaded into containers and shipped for burial.

The reactor vessel and its internals will be segmented and remotely loaded into steel liners for transport to the burial facility in heavily shielded shipping casks. The reactor vessel and internals will have sufficiently high radiation levels to require all cutting to be done underwater or behind heavy shields, using cutting torches operated

by remote control to reduce radiation exposure to the workers.

Concrete immediately surrounding the reactor vessel is expected to be radioactive and will be removed by controlled blasting. This blasting process is well-developed and safe and is the most cost effective way to remove the heavily-reinforced concrete from the structure. The surface of sections of interior floors within areas of the Reactor Building (Containment) and other buildings in the power block is expected to be contaminated from exposure to contaminated air/water as a result of plant operations. This contamination will be removed by scarification (surface removal) so that the remaining surface will be clean and will not require costly controlled burial.

Finally, an extensive radiation survey will be performed to ensure all radioactivity above the levels specified by the NRC has been removed from the site. With NRC confirmation, the facility may be released for unrestricted access, and the operating license terminated (once the spent fuel has been relocated to an independent licensed facility).

Period 3 - Site Restoration: This period, which begins once the operating license termination activities have concluded, involves the demolition of all remaining structures to a depth, typically, of three feet below grade. Clean rubble would be used on-site for fill, and additional soil would be used to cover each subgrade structure.

Q. Please describe the process of dismantling a fossil power plant and how that process

was reflected in the Duquesne Light estimates.

A. Approximately three months prior to final shutdown, engineering and planning would begin on the preparation of the Dismantling Engineering Plan (Plan) and Environmental Report (ER). The Plan describes the status of the facility at shutdown, work to be accomplished, safety analyses associated with each of the major activities, general procedures and sequence to be followed, and final site condition upon completion of all work. Similarly, the ER would evaluate environmental effects to workers and the public and waste generation effects on the site and environment. These documents would be submitted to the Environmental Protection Agency and other applicable regulatory agencies for review, approval, and authorization to proceed. The sequence of work would proceed as follows:

Period 1 - Site Preparations: Site preparations would begin upon shutdown of the facility and would involve site work needed to initiate dismantling. It is assumed that all fuel was burned prior to shutdown or was transferred to another operating unit.

Period 2 - Dismantling Operations: This work would begin upon receipt of all necessary regulatory approvals. This phase of the work involves the removal of all components of the boiler, air quality treatment systems (electrostatic precipitators, flue gas desulfurization systems, etc.), fuel handling systems (coal conveyors, crushers, oil storage tanks, etc.), the turbine-generator, and the condensate and feedwater systems. In general, the boiler will be dismantled in a bottoms-up mode,

whereby the lower sections of the boilers will be cut at grade level, and remaining upper sections lowered to grade or scaffolding erected to cut the upper sections of the boiler furnace. This method of dismantling is necessary for the top-hung type of boiler that is supported from the steel structure. Care must be taken to ensure that sections are removed uniformly from the bottom to avoid any unbalanced load on the steel structure that may cause it to become unstable.

Steel structures used to support the boiler and turbine-generator components will be dismantled by controlled demolition and lowering sections to grade by cranes to prevent injury to workers on lower floors. The steel structures will be dismantled from the top down which essentially reverses the construction sequence.

Concrete structures such as boiler foundations, floors, turbine-generator pedestals and support buildings will be demolished by conventional wrecking methods. These may include the use of wrecking balls, pneumatically-operated rams on a backhoe, or controlled blasting.

Period 3 - Site Restoration: Site restoration involves the re-grading of all areas that were disturbed by the dismantling process. Structures will be removed to three feet below grade to permit re-vegetation of the site or to eliminate at-grade hazards. Clean rubble would be used on site for fill, and additional soil would be used to cover each subgrade structure. The site would be graded and stabilized.

VII. HIGH-LEVEL RADIOACTIVE WASTE

Q. Does the estimated cost of decommissioning include an allowance for disposal of high-level radioactive waste?

A. No. It is important to note that, although decommissioning of a site cannot be complete without the removal of all spent fuel and source material, the disposition of high-level waste is outside the scope of decommissioning. In accordance with the Nuclear Waste Policy Act of 1982 (Public Law 94-425), the DOE is required by law to enter into contracts with owners and/or generators of spent fuel, pursuant to which the DOE is contractually responsible for final disposition of spent fuel as high-level nuclear waste. To cover the cost of spent fuel disposition, the DOE assesses the facility operator 1 mill/kWh based on electrical generation. Therefore, the cost of disposal of spent fuel is accounted for separately and is specifically excluded from the decommissioning cost estimates.

Q. Does the presence of spent fuel on-site, following plant shutdown, impact the decommissioning processes?

A. Yes. Although the decommissioning studies do not address the removal or disposal of spent fuel from the nuclear sites, they do consider the constraint that the presence of spent fuel on the site can impose on other decommissioning activities. In particular, the decommissioning scheduling performed in support of the cost studies recognizes

delays due to the present uncertainties surrounding the disposal of spent fuel in the United States. It is currently anticipated that both Beaver Valley and Perry will need to provide for extended storage and caretaking of their respective spent fuel inventories until such time as off-site disposal becomes an option.

The presence of the spent fuel storage facilities will necessarily delay the final release of the sites for alternative/unrestricted use. This delay is reflected in the increased cost of the period-dependent activities. To the extent possible, the decommissioning estimates were structured around the spent fuel areas of the stations and their availability for decontamination, such that delays in decommissioning other portions of the facility could be minimized. The study assumed that an Independent Spent Fuel Storage Installation (ISFSI) would be available at each site in support of plant operations. These facilities are assumed to be expanded to accommodate the additional spent fuel residing in the spent fuel storage pools at shutdown so that the Reactor Building can be released for decommissioning (for the DECON scenario). Decommissioning would proceed on the surrounding facilities and non-essential systems during the transfer period. Current expectations are for the last spent fuel bundles to remain at the Beaver Valley site until 2043, and at the Perry site until ____.

Q. What is the basis for the spent fuel management plan?

A. The transfer of spent fuel from the two stations to the government's geologic or

interim storage facility is based upon a 2010 startup date and fuel shipments at the acceptance rate proposed in current legislation.

VIII. SITE RESTORATION

Q. Does the process of decommissioning extend beyond the removal of contaminated and activated material from the site?

A. Yes. There are additional activities, beyond the removal of contaminated material, that will be undertaken in the process of releasing the site for alternative use. This work includes costs for the remaining dismantling and grading operations.

Q. Are there any regulations or codes applicable to dismantling?

A. Yes. The Building Officials & Code Administrators (BOCA) National Building Code, widely adopted by most states, including Pennsylvania, requires that retired structures may not be left in an unsafe condition. Specifically, Section 120.1, "Right to Deem Unsafe," states:

> *All buildings or structures that are or hereafter shall become unsafe, unsanitary or deficient in adequate means of egress facilities, or which constitute a fire hazard, or are otherwise dangerous to human life or the public welfare, or which involve illegal or improper use, occupancy or maintenance, shall be deemed unsafe buildings or structures. All unsafe structures shall be taken down and removed or made safe and secure, as the code official deems necessary and as provided for in this section. A vacant building, unguarded or open at door or window shall be deemed a fire hazard and unsafe within the meaning of this code.*

(Emphasis Added)

A retired power plant fits this definition of an unsafe structure which must be taken down and removed or made safe and secure.

Q. Why is dismantling after a power plant is taken out of service the appropriate alternative?

A. Securing, maintaining and guarding retired power plants indefinitely is costly, requiring either a full-time guard force or intrusion detection devices and alarms monitored by local law enforcement agencies, as well as general building maintenance to keep the structures in a safe condition.

Q. Can power plant components be reused in repowering?

A. The designs of new generation power plants are not likely to use the same size and configuration of components, nor require the same type of building enclosures. Optimum facility design will be sized to match the megawatt size of a replacement power plant, if any, either larger or smaller. For example, new combustion turbine-generators are modular, self-contained units that don't need a building enclosure. Combined cycle units may require larger turbine buildings to enclose the waste heat steam generators which supply steam to the turbine. The cost to renovate older buildings and bring them to current safety code standards, combined with the less-than-optimum facility design makes reuse of the existing buildings an unlikely scenario. Furthermore, the existing components are likely to be of an obsolete design,

more costly to operate and maintain and may not be compatible with new instrumentation and control systems.

Q. Please describe the cost components of site restoration.

A. The largest component of the site restoration costs is for dismantling the decontaminated structures. Next largest are costs incurred to remove certain non-contaminated systems and components. This work must be accomplished to provide access to all areas of the plant for the radiation surveys required by the NRC prior to license termination and release of the site for another use.

Q. Why is it necessary to dismantle the remaining structures at the site?

A. Efficient removal of the contaminated materials and verification that the radionuclide concentrations are below the stringent NRC limits will require substantial damage to many of the structures. Blasting, coring, drilling, scarification (surface removal), and the other decontamination work will damage power block structures including the Reactor, Radwaste and Turbine Buildings.

Verifying that subsurface radionuclide concentrations meet NRC site release requirements may require removal of grade slabs and lower floors, potentially weakening footings and structural supports. This will be necessary for those facilities and plant areas where historical records indicate the potential of radionuclides having been present in the soil, where inventory losses have been recorded, or where required

to confirm that subsurface process and drain lines did not leak over the operating life of the units.

It is also important to remember that the structures were custom designed and built to support a specific nuclear unit that went into service in the 1970s in the case of Beaver Valley 1 and the 1980s in the case of Beaver Valley 2 and Perry. They would most likely be an impediment rather than a benefit to any potential future plant, if one were ever to be constructed at the site. Moreover, the facility's infrastructure degrades without continual maintenance. Unless the site is redeveloped shortly after release of its NRC license, the value in reusing plant facilities quickly diminishes. For example, following NASA's development of TVA's abandoned Yellow Creek nuclear power plant for its Advanced Solid Rocket Motor program, a Lockheed spokesman was quoted as stating: "[t]he abandoned nuclear power plant contributed little to the NASA project. Some of the power and water infrastructure was used but had to be reconstructed after eight years of neglect."

Dismantling is clearly the most appropriate and cost-effective option and should serve as the foundation for the decommissioning cost estimate. It is unreasonable to anticipate that these structures would be repaired and preserved after the radiological contamination is removed.

Q. Why is it necessary to dismantle a fossil-fired plant?

A. Remediation of fossil-fired facilities is inherently destructive, including creation of large access ways, dismantling of peripheral structures, controlled blasting, removal of roofs and walls, excavation of footings, etc. Precluding reconstruction, a retired fossil facility poses hazards including large interior open areas, pits, shafts and underground tunnels. With many of the plant services removed from service, the structures would be unheated, dark, littered with concrete rubble and structural debris obstructing means of egress. Condensation and groundwater intrusion and bird infiltration would soon create hazardous conditions, promoting unsanitary biological infestations, accelerating corrosion and general facility deterioration. A dedicated and systematic maintenance program is necessary to maintain the facility in a "safe" condition. Security measures are necessary to limit the liability inherent in casual or deliberate intrusion by the public. These maintenance and surveillance programs are expensive.

The steel and concrete or brick structures at fossil sites were not designed to prevent deliberate intrusion. Large glass windows, sheet metal siding, loading ramps and multiple ingress points allow easy entry into the station confines. Visitation of older, shutdown units has conclusively demonstrated both the speed and effects of facility deterioration. Such deterioration includes broken windows, leaking roofs, torn or damaged siding, obstructed stairwells with poor egress, and unsanitary conditions caused by the effects of weather, corrosion, ground water intrusion and vermin. Stacks, mine openings, fill ponds and lagoons with steep sloped banks, and river

intake structures are high exposure liabilities and inherently dangerous to human life.

The alternative to perpetual caretaking and site surveillance is to dismantle the site as soon as practical. This activity is the most cost-effective when included within the schedule for site remediation, due to resources available on-site and the expected condition of the facilities.

The Pennsylvania Public Utilities Commission has acknowledged that dismantling of the decommissioned structures, following license termination at nuclear power plants, is an appropriate measure to protect public health and safety. The same safety concerns exist at retired fossil power stations, and for this reason TLG recommends dismantling fossil power plant structures

IX. SALVAGE AND SCRAP

Q. How was scrap or salvage credit included in the overall estimate?

A. Credit for carbon steel, stainless steel and copper scrap was included in the overall fossil estimates based on current published scrap values. No credit was included for salvage of any components because these components will be of an obsolete design by the time these plants are dismantled. The labor cost to recover potentially salvageable materials (valves, pumps, motors, etc.), and to store, protect, package and transport these components is not warranted. As such, these materials were

considered as scrap.

No positive value was assumed for the scrap generated in the decommissioning of the nuclear units primarily due to the off-setting expense of the surveying required to verify to a 100% confidence level that material leaving the site has no detectable radionuclide contamination.

X. DECOMMISSIONING FEASIBILITY

Q. What is the feasibility of the decommissioning premise?

A. There is extensive experience in the United States and in other countries for the complete dismantling of fossil and nuclear power plants and other large industrial facilities such as chemical refineries and steel mills. This directly related experience shows that the generating units can be completely dismantled safely.

Between 1960 and 1995, 103 licensed nuclear reactors in the U.S. were designated for decommissioning or were in the process of being decommissioned. Of these, sixteen were designed as commercial nuclear power plants, four were demonstration nuclear power plants, eight were licensed test reactors, and 55 were research reactors. The remaining 20 were critical (non-power producing) reactors and/or critical facilities decommissioned or scheduled to be decommissioned. They have been or will be totally dismantled, and their licenses have been or will be terminated. Many other

reactor facilities in Europe, Japan and Canada have been successfully decommissioned using demonstrated techniques. France has decommissioned 13 reactors, Germany 6, Italy 8, Japan 7, Switzerland 2, United Kingdom 5 and Canada 2.

The International Atomic Energy Agency (IAEA) indicates that 147 decommissioning programs have been undertaken or completed by its member countries. However, no breakdown is available for the various types of reactors from the IAEA.

The feasibility of decommissioning in the U.S. is well documented in the successful dismantling of Shippingport Atomic Power Station, Elk River Reactor, Walter Reed Army Research Reactor, Ames Laboratory Reactor and Sodium Reactor Experiment (SRE) facilities. Internationally, the decommissioning programs underway in England (Windscale Reactor), Germany (Gundremmingen), and Japan (Japan Power Demonstration Reactor) are further evidence of demonstrated technology. The basic activities of cutting pipe, segmenting vessels, demolishing reinforced concrete and decontaminating contaminated systems and structures are the same on a unit cost factor basis ($/cut, $/cubic yard, etc.) regardless of the size of the structure or megawatt rating of the plant. For example, a contaminated 12-inch diameter pipe in a 3000 MWt plant takes as long to cut as it does in a 58 MWt plant, although the length of pipe to be cut will be greater in the larger plant.

The major activities include removal of contaminated piping and components using

conventional power hack saws, oxyacetylene torches or plasma arc torches within a contamination control tent. Removal of the reactor vessel and internals can be accomplished using an arc-gouging fuel gas torch or an arc saw, which is currently capable of cutting through carbon and stainless steel up to 12 inches thick (current vessels are less than 10 inches thick).

The remote manipulator technology required to cut the reactor vessel and internals was developed by Oak Ridge National Laboratory for the Elk River Reactor dismantling. This technology uses the plasma arc torch for cutting. This same tool was used in the SRE vessel cutting activity. Many of the tools and techniques used in decommissioning have been used in operating plants for maintenance and equipment replacement programs. Such technology, therefore, is not unique and further shows the feasibility of decommissioning.

Controlled blasting concrete demolition methods are well developed and have been used extensively in the mining industry. These same techniques were successfully employed in the demolition of the Elk River Reactor, where eight-foot thick, heavily reinforced concrete sections of the biological shield were safely removed with explosives without damaging or interfering with the operation of adjacent operating power generating units. The successful application of these decommissioning techniques in both small and large nuclear power plants assures decommissioning feasibility. Both the technology and the methodology for efficient decommissioning are available and fully tested.

Q. Does this conclude your prepared direct testimony?

A. Yes.

ORIGINAL

VOLUME V

BEFORE THE

PENNSYLVANIA PUBLIC UTILITY COMMISSION

DUQUESNE LIGHT COMPANY
DOCKET NO. R-00974104

APPLICATION FOR APPROVAL OF RESTRUCTURING PLAN UNDER SECTION 2806 OF THE PUBLIC UTILITY CODE

Contents:

Table of Contents

DUQUESNE LIGHT COMPANY

A.-Summary of Filing

1) Provide a summary discussion of the transition plan tariffs, and the unbundled elements related to tariffs in effect as of December 31, 1996.

Response:

Please refer to the testimony of Mr. Lahtinen

DUQUESNE LIGHT COMPANY

A.-Summary of Filing

2) Identify the proposed witnesses for all statements, exhibits and schedules and include all direct statements, exhibits and schedules which form the direct case in support of the restructuring plan.

Response:

The direct statements, exhibits and schedules are contained in other volumes of this filing. For a list of the witnesses and a summary of their statements, please refer to the testimony of Mr. Marshall.

DUQUESNE LIGHT COMPANY

A.- Summary of Filing

3. Provide a single page summary table showing, at present rates, together with references to the filing information, the following as claimed for the fully adjusted year:

(a) Revenues
(b) Operating Expenses
(c) Operating Income
(d) Rate Base
(e) Rate of Return (produced)

Response:

See attached.

DUQUESNE LIGHT COMPANY
Summary Table

	Total
Operating revenues	$1,211,186,024
Operating expenses	926,163,377
Operating income	228,274,759
Rate base	2,368,919,523
Rate of return	9.60%

Response:

See Morgan O'Brien's testimony.

DUQUESNE LIGHT COMPANY

A.- Summary of Filing

4. Provide the following:

(a) The book, or budgeted, statement of income for the base year
(b) A statement of income under present rates after adjustment
(c) Unless otherwise provided, submit detail schedules to show all base year data, all adjustments to the base year data and a detailed summary of the amounts allocable to distribution, jurisdictional transmission, generation and "joint and common" categories.
(d) Unless otherwise provided, supply a detailed study and analysis and describe your proposed methodology to identify and separate all costs by the following categories, as well as your methodology allocating joint and common costs to jurisdictional generation and distribution and non-jurisdictional categories. "Joint and common costs" are costs which are not directly chargeable to the previous three categories:

    (1) jurisdictional generation costs
    (2) jurisdictional distribution costs
    (3) non-jurisdictional costs
    (4) joint and common costs

(e) Adjustments to annualize and normalize under present rates.
(f) A statement of Changes in Financial Position for the base year ending December 31, 1996. See Schedule A attached.
(g) A statement of Cash Flows for the base year ending December 31, 1996. See Schedule A attached.

Response:

See Morgan O'Brien's testimony.

Name of Respondent	This Report Is:	Date of Report (Mo, Da, Yr)	Year of Report
Duquesne Light Company	(1) [X] An Original (2) [ ] A Resubmission	04/30/97	Dec. 31, 1996

STATEMENT OF CASH FLOWS

1. If the notes to the cash flow statement in the respondents annual stockholders report are applicable to this statement, such notes should be included in pages 122-123. Information about noncash investing and financing activities should be provided on pages 122-123. Provide also on pages 122-123 a reconciliation between "Cash and Cash Equivalents at End of Year" with related amounts on the balance sheet.
2. Under "Other" specify significant amounts and group others.
3. Operating Activities - Other: Include gains and losses pertaining to operating activities only. Gains and losses pertaining to investing and financing activities should be reported in those activities. Show on pages 122-123 the amount of interest paid (net of amounts capitalized) and income taxes paid.

Line No.	Description (See Instruction No. 5 for Explanation of Codes) (a)	Amounts (b)
1	Net Cash Flow from Operating Activities:	
2	Net Income (Line 72(c) on page 117)	$149,860,179
3	Noncash Charges (Credits) to Income:	
4	Depreciation and Depletion	177,616,072
5	Amortization of (Specify)	
6	Amortization of Capital and nuclear leases and other	36,611,419
7		
8	Deferred Income Taxes (Net)	(77,316,659)
9	Investment Tax Credit Adjustment (Net)	(9,559,012)
10	Net (Increase) Decrease in Receivables	7,586,001
11	Net (Increase) Decrease in Inventory	6,354,007
12	Net (Increase) Decrease in Allowances Inventory	
13	Net Increase (Decrease) in Payables and Accrued Expenses	5,160,955
14	Net (Increase) Decrease in Other Regulatory Assets	42,876,606
15	Net Increase (Decrease) in Other Regulatory Liabilities	(794,417)
16	(Less) Allowance for Other Funds Used During Construction	1
17	(Less) Undistributed Earnings from Subsidiary Companies	
18	Other:	
19	Net increase in other current assets	(23,206,629)
20	Other - net	(38,587,398)
21		
22	Net Cash Provided by (Used in) Operating Activities (Total of lines 2 thru 21)	$276,601,123
23		
24	Cash Flows from Investment Activities:	
25	Construction and Acquisition of Plant (Including Land):	
26	Gross Additions to Utility Plant (less nuclear fuel)	(88,545,948)
27	Gross Additions to Nuclear Fuel	
28	Gross Additions to Common Utility Plant	
29	Gross Additions to Nonutility Plant	
30	(Less) Allowance for Other Funds Used During Construction	(1,249,515)
31	Other:	
32		
33		
34	Cash Outflows for Plant (Total of lines 26 thru 33)	($89,795,463)
35		
36	Acquisition of Other Noncurrent Assets (d)	
37	Proceeds from Disposal of Noncurrent Assets (d)	169,100,000
38		
39	Investments in and Advances to Assoc. and Subsidiary Companies	
40	Contributions and Advances from Assoc. and Subsidiary Companies	
41	Disposition of Investments in (and Advances to)	
42	Associated and Subsidiary Companies	
43		
44	Purchase of Investment Securities (a)	(4,225,096)
45	Proceeds from Sales of Investment Securities (a)	4,2[illegible].191

Name of Respondent Duquesne Light Company	This Report Is: (1) [X] An Original (2) [ ] A Resubmission	Date of Report (Mo, Da, Yr) 04/30/97	Year of Report Dec. 31, 1996

STATEMENT OF CASH FLOWS (Continued)

4. Investing Activities
Include at Other (line 31) net cash outflow to acquire other companies. Provide a reconciliation of assets acquired with liabilities assumed on pages 122-123.
Do not include on this statement the dollar amount of leases capitalized per US of A General Instruction 20; instead provide a reconciliation of the dollar amount of leases capitalized with the plant cost on pages 122-123.

5. Codes used:
(a) Net proceeds or payments.
(b) Bonds,debentures and other long term debt.
(c) Include commercial paper.
(d) Identify separately such items as investments, assets, intangibles, etc.

6. Enter on pages 122-123 clarifications and explanatio

Line No.	Description (See Instruction No. 5 for Explanation of Codes) (a)	Amounts (b)
46	Loans Made or Purchased	
47	Collections on Loans	
48		
49	Net (Increase) Decrease in Receivables	
50	Net (Increase) Decrease in Inventory	
51	Net (Increase) Decrease in Allowances Held for Speculation	
52	Net Increase (Decrease) in Payables and Accrued Expenses	
53	Other: net investing	1,273,461
54		
55		
56	Net Cash Provided by (Used in) Investing Activities	
57	(Total of lines 34 thru 55)	$80,556,093
58		
59	Cash Flows from Financing Activities:	
60	Proceeds from Issuance of:	
61	Long - Term Debt (b)	
62	Preferred Stock	150,000,000
63	Common Stock	
64	Other:	
65		
66	Net Increase in Short - Term Debt (c)	
67	Other:	
68		
69		
70	Cash Provided by Outside Sources (Total of lines 61 thru 69)	$150,000,000
71		
72	Payments for Retirement of:	
73	Long - term Debt (b)	(50,812,000)
74	Preferred Stock	
75	Common Stock	
76	Other: Capital Leases	(19,325,970)
77	Net Financing	(3,532,249)
78	Net Decrease in Short-Term Debt (c)	
79	Capital Surplus decrease - Equity Security Depreciation	(2,256,055)
80	Dividends on Preferred Stock	(5,015,113)
81	Dividends on Common Stock	(276,000,000)
82	Net Cash provided by (Used in) Financing Activities	
83	(Total of lines 70 thru 81)	($206,941,387)
84		
85	Net Increase (Decrease) in Cash and Cash Equivalents	
86	(Total of lines 22, 57,and 83)	$150,215,829
87		
88	Cash and Cash Equivalents at Beginning of Year	4,198,091
89		
90	Cash and Cash Equivalents at End of Year	154,413,921

DUQUESNE LIGHT COMPANY

A.- Summary of Filing

5. Provide a schedule showing all revenues and expenses for the base year and for the12-month period immediately preceding the base year, together with an explanation for major variances in excess of 10% or over $1 million, whichever is less, between base year revenues and expenses and those for the previous 12-month period. Revenues and expenses shall be summarized by the major account categories listed below. If actual data for the base year is not readily available by these categories, an analysis of the data for the 12-month period immediately preceding the base year or for the most recent available calendar year may serve as the basis for ratably allocating the actual data into account categories.

Response:

See attached.

		December 31, 1996	December 31, 1995	$ Variance	% Variance	
OPERATING REVENUES						
Electric Service Revenues						
440	Sales Of Elec-Residential	($404,183,111)	($415,945,422)	$11,762,311	-3%	Explanation 1
442	Sales Of Elec-Commercial	(475,319,391)	(482,389,454)	7,070,063	-1%	Explanation 2
442	Sales Of Elec-Industrial	(189,526,889)	(192,274,163)	2,747,274	-1%	Explanation 3
444	Sales Of Elec-Public Street/Highway Lighting	(16,620,246)	(16,788,433)	168,187	-1%	
447	Sales Of Elec-Sales For Resale	(857,283)	(855,342)	(1,941)	0%	
	Total Electric Service Revenues	($1,086,506,920)	($1,108,252,814)	$21,745,894	-2%	
OTHER ELECTRIC REVENUES						
450	Other Oper Revenues-Forfeited Discounts	($4,746,547)	($4,469,851)	($276,696)	6%	
451	Other Oper Revenues-Misc Service Revenue	(1,450,207)	(1,175,263)	(274,944)	23%	Explanation 4
454	Other Oper Revenues-Rent from Electric Property	(7,608,687)	(7,603,482)	(5,205)	0%	
456	Other Oper Revenues-Other Electric Revenues	(24,275,196)	(21,984,216)	(2,290,980)	10%	Explanation 5
447	Sales Of Elec-Sales For Resale	(58,291,849)	(55,962,756)	(2,329,093)	4%	Explanation 6
	Total Other Electric Revenues	($96,372,486)	($91,195,568)	($5,176,918)	6%	
	Total Operating Revenues	($1,182,879,406)	($1,199,448,382)	$16,568,976	-1%	
OPERATING EXPENSES & TAXES						
401-402 Operation and Maintenance Expenses						
	Fuel	$204,880,935	$208,545,903	($3,664,968)	-2%	Explanation 7
	Net Interchange	32,269,274	23,571,460	8,697,814	37%	Explanation 8
	Deferred Fuel Costs	(4,527,073)	6,256,614	(10,783,687)	-172%	Explanation 9
	Other Production Power Expense	163,972,982	173,466,853	(9,493,871)	-5%	Explanation 10
	Transmission Expenses	10,803,324	11,180,219	(376,895)	-3%	
	Distribution Expenses	37,071,307	36,608,491	462,816	1%	
	Customer Accounts Expense	32,496,137	31,529,031	967,106	3%	
	Customer Service & Info. Expense	2,167,629	2,235,314	(67,685)	-3%	
	Sales Expense	4,533,989	1,964,382	2,569,607	131%	Explanation 11
	Administrative and General Expense	91,449,625	95,501,875	(4,052,250)	-4%	Explanation 12
	Subtotal	$575,118,129	$590,860,142	($15,742,013)		

		December 31, 1996	December 31, 1995	$ Variance	% Variance	
403	Depreciation Expense	$172,588,875	$146,304,343	$26,284,532	18%	Explanation 13
403	Nuclear Decommissioning Expense	5,027,197	4,081,610	945,587	23%	Explanation 14
404	Amort Of Limited Term Electric Plant	7,849,824	8,730,189	(880,365)	-10%	Explanation 15
405	Amort Of Other Electric Plant	10,046,549	0	10,046,549	100%	Explanation 16
406	Amort of Electric Plant Acquisition Adjustments	353,580	1,060,740	(707,160)	-67%	Explanation 17
407	Amort Of Property Losses	8,471,653	15,469,368	(6,997,715)	-45%	Explanation 18
408	Taxes Other Than Income Taxes	84,624,688	86,349,129	(1,724,441)	-2%	Explanation 19
	Total Operating Expenses Before Federal & State Income Taxes	$864,080,495	$852,855,521	$11,224,974	1%	
	Net Operating Income Before Income Taxes	($318,798,911)	($346,592,861)	$27,793,950	-8%	
409	Provision For Income Taxes - Federal & State	$124,032,120	$130,075,676	($6,043,556)	-5%	Explanation 20
410/411	Provision For Deferred Income Taxes - Fed & State	(19,576,273)	(20,078,537)	502,264	-3%	
411	Investment Tax Credit Adjustment - Amortization Cr	(7,838,483)	(7,252,534)	(585,949)	8%	
411	Gain From Disposition Of Utility Property	(226,313)	(171,075)	(55,238)	32%	Explanation 21
	Total Income Taxes	$96,391,051	$102,573,530	($6,182,479)	-6%	
	Net Utility Operating Income	($222,407,860)	($244,019,331)	$21,611,471	-9%	
OTHER INCOME AND DEDUCTIONS						
Other Income						
418	Non-Utility Operating Rental Income	$57,428	$59,761	($2,333)	-4%	
419	Interest and Dividend Income	(12,215,867)	(7,922,854)	(4,293,013)	54%	Explanation 22
419	Allowance For Other Funds Used Construction	(1)	(720,866)	720,865	-100%	Explanation 23
421	Misc Non-Operating Income	(27,732,371)	(17,021,375)	(10,710,996)	63%	Explanation 24
	Total Other Income	($39,890,811)	($25,605,334)	($14,285,477)	56%	
Other Income Deductions						
421	Misc Non-Operating Income	$4,582,030	$7,594,133	($3,012,103)	-40%	Explanation 25
426	Miscellaneous	13,952,727	15,179,903	(1,227,176)	-8%	Explanation 26
	Total Other Income Deductions	$18,534,757	$22,774,036	($4,239,279)	-19%	
TAXES APPLICABLE TO OTHER INCOME AND DEDUCTIONS						
409	Income Tax - Other Inc & Ded - Federal & State	$56,542,098	($620,000)	$57,162,098	-9220%	Explanation 27
411	Deferred Income Tax - Other Inc & Ded - Fed & State	(57,740,386)	0	(57,740,386)	100%	Explanation 28
420	Investment Tax Credits	(1,720,529)	(578,347)	(1,142,182)	197%	Explanation 29
	Total Taxes Applic. to Other Inc & Ded	($2,918,817)	($1,198,347)	($1,720,470)	144%	
	Income Before Interest Charges	($246,682,731)	($248,048,976)	$1,366,245	-1%	

		December 31, 1996	December 31, 1995	$ Variance	% Variance	
427	Interest On Long-Term Debt	$82,504,832	$89,139,440	($6,634,608)	-7%	Explanation 30
428	Amort of Debt Discount/Expense	6,091,881	6,367,812	(275,931)	-4%	
429	Amort Of Premium on Debt	(118,820)	(116,353)	(2,467)	2%	
431	Other Interest Expense	9,594,174	2,599,448	6,994,726	269%	Explanation 31
432	Allowance for Borrowed Funds Used During Const	(1,249,515)	(763,837)	(485,678)	64%	Explanation 32
	Total Interest Charges	$96,822,552	$97,226,510	($403,958)	0%	
	Net Income	($149,860,179)	($150,822,466)	$962,287	-1%	

Explanation 1 - Account 440, Sales of Electricity, Residential, decreased 3% or $11,762,311:

Sales to residential customers are strongly influenced by weather conditions. Warmer summer and colder winter seasons lead to increased customer use of electricity for cooling and heating. Residential KWH sales decreased 1.7 percent due to unseasonably warm summer temperatures in 1995, as compared to 1996, resulting in decreased residential revenues of $8.9 million. Cooling degree-days were 31.2% lower than in 1995.

Explanation 2 - Account 442, Sales of Electricity, Commercial, decreased 1% or $7,070,063:

While sales to commercial customers are strongly influenced by weather conditions, commercial sales are also affected by regional economic conditions. Even though continued regional economic development activities offset the effects of a milder summer in 1996 as compared to 1995, and KWH sales increased slightly, commercial customer revenues decreased $7.1 million. This decrease is the result of lower demand charges caused by both customer load management and negotiated rate concessions.

Explanation 3 - Account 442, Sales of Electricity, Industrial, decreased 1% or $2,747,274:

Industrial revenues decreased 1 percent despite a 1.5 percent increase in KWH sales volume in 1996 when compared to the prior year. There were more sales at lower rates and fewer sales at higher rates in 1996. The reason for increased sales can be attributed to sales to Duquesne's largest industrial customer, USX, because of a self-generation outage, as a result of coke oven outages, experienced in 1996. The increase was partially offset by lower sales to J&L Specialty. J&L experienced production stoppages in the first and second quarters of 1996 due to electric arc furnace outages and in the third quarter of 1996 in order to reduce inventory levels.

Explanation 4 - Account 451, Other Operating Revenues, Miscellaneous Service Revenues, increased 23% or $274,944:

There was an increase of $274,944 in Miscellaneous Service Revenues from 1995 to 1996 related to several service contracts and master lease agreements with telephone companies for utilization of space on Duquesne's poles and also for installation of cables, and other services.

Explanation 5 - Account 456, Other Operating Revenues, Other Electric Revenues, increased 10% or $2,290,980:

Other electric revenues are primarily comprised of revenues from joint owners of Beaver Valley Unit 1 and Unit 2 Power Stations (BVPS) for their share of the administrative and general costs of operating these units. Other electric revenues, therefore, fluctuate depending on the timing of scheduled refueling and maintenance outages at BVPS when significant costs are incurred. Both units underwent refueling outages in 1996 and 1995, however, Beaver Valley Unit 2 experienced an extended outage of 107 days during 1996 due to unanticipated repairs to two residual heat removal pumps and reactor head vent valves, resulting in a $3.0 million increase in other electric revenues during 1996.

Explanation 6 - Account 447, Sales of Electricity, Sales for Resale, increased 4% or $2,329,093:

Fluctuations in electricity sales to other utilities are related to Duquesne's customer energy requirements, the energy market and transmission conditions, and the availability of Duquesne's generating stations. Duquesne's electricity KWH sales to other utilities in 1995 were 11.3 percent less than in 1996 due to the timing of generating station outages and the fluctuating level of sales to Duquesne's electric utility customers.

Explanation 7 - Fuel, decreased 2% or $3,664,968:

Account 501, Fuel - Steam Power Generation, increased 2% or $3,486,493

Total kilowatt-hour sales increased 2% from 1995 therefore resulting in an increase in fuel costs as more fuel was consumed in the production of electricity. In addition, the fuel mix changed. Fossil generation increased by 3 percent or 316,835 MWh in 1996 as a result of three nuclear outages which occurred in 1996 compared to two nuclear outages in 1995.

Account 518, Nuclear Fuel, decreased 25% or $8,750,965

Nuclear fuel expense decreased in 1996 from 1995 as there were three outages in 1996 (BV Unit 1, BV Unit 2 and Perry) versus two short outages in 1995 (BV Unit 1 and BV Unit 2). The decrease in nuclear generation in 1996 was approximately 6 percent or 294,964 MWh.

Account 509, Emission Allowances Consumed, increased 100% or $2,068,025

Purchased emission allowance credits relating to the fossil stations caused an increase in Other Purchased Power Expenses of $2.1 million. These credits were not utilized as a part of our Clean Air Act Amendments compliance strategy in 1995; however, beginning in 1996, purchased emission allowance credits were utilized as a part of our compliance strategy.

Account 547, Other Power Generation - Fuel Oil, decreased 70% or $468,521

The significantly hotter summer temperatures during 1995 resulted in increased sales of electricity to residential customers in particular. To meet the increased demand, Duquesne utilized its only oil-fired generating station, Brunot Island. Brunot Island is the last peaking unit loaded under our economic dispatch schedule. During 1995, the unit's net plant output was -858 MWh vs. -6,846 in 1996 (the unit typically maintains a negative output due to the utilization of electricity for its own use). The usage of the Brunot Island plant increased fuel oil consumed in the production of electricity and therefore increased fuel oil costs for 1995.

Explanation 8 - Net Interchange, increased 37% or $8,697,814:

Net interchange expense increased in 1996 as compared to 1995 primarily as a result of a 33 percent increase in purchased power prices in 1996. There was an increase of approximately 4 percent in the purchased power volume in 1996 due to there being three nuclear outages in 1996 (BV Unit 1, BV Unit 2 and Perry) versus two short nuclear unit outages in 1995 (BV Unit 1 and BV Unit 2).

Explanation 9 - Deferred Fuel Costs, decreased 172% or $10,783,687:

In conjunction with the Energy Cost Rate (ECR) Adjustment Clause, Duquesne records deferred fuel costs to offset differences between actual fuel costs and the level of fuel costs currently recovered from its rate-regulated electric utility customers. During 1996, actual ECR fuel costs were higher than amounts collected from customers for fuel cost recovery. During 1995, the actual ECR fuel costs were lower than amounts collected from customers for fuel cost recovery.

Explanation 10 - Other Production Power Expense, decreased 5% or $9,493,871:

Included in Other Production Power Expenses, nuclear power generation related expenses decreased approximately $10 million from 1995 to 1996 from the following:

BV Unit 1 operating costs related to contract costs and a reduction in the Perry outage expense resulted in a $5.2 million decrease.

In addition, there was less outage amortization being expensed in 1996 due to the nuclear outage cost savings at Beaver Valley Unit 1 and Perry. Also, Perry had higher costs associated with the disposition of low-level waste during 1995 due to the build up of waste (that was stored on-site) over a period of time. Accordingly, there was significantly less waste to dispose of in 1996. These two items accounted for an approximate $2.2 million decrease.

Approximately $3 million of previous inventory requisitions was reclaimed back into inventory at Beaver Valley. This inventory had been previously requisitioned out of the storeroom for use in projects and expensed. Later found not used, it was determined that these items should be reclaimed back into inventory and credited to current year expenses. This treatment was preferred by the IRS thereby requiring Duquesne to pay taxes related to the benefit of this project immediately.

Explanation 11 - Sales Expense, increased 131% or $2,569,607:

A major advertising campaign was established in June of 1996. This campaign was projected to continue through 1997. The campaign resulted in an approximate increase of $2.2 million in Sales Expense from 1995 to 1996.

Explanation 12 - Administrative and General Expense, decreased 4% or $4,052,250:

Administrative and General expenses included costs related to the Company's Long-Term Incentive Plan (LTIP). DQE's stock price increased 34 percent in 1995 and 2 percent in 1996. As a result, costs charged to administrative and general related to incentive compensation decreased by $8.5 million in 1996.

Offsetting this decrease was a $3.5 million insurance recovery in 1995.

Explanation 13 - Account 403, Depreciation Expense, increased 18% or $26,284,532:

Depreciation expense increased in 1996 when compared to 1995 primarily due to the increase in Duquesne's composite depreciation rate from 3.5 percent to 4.25 percent effective May 1, 1996, based upon the Company's annual depreciation filing with the PUC in 1996.

Explanation 14 - Account 403, Depreciation Expense, Nuclear Decommissioning Expense, increased 23% or $945,587:

Nuclear decommissioning expense in 1995 was approximately $4 million. Based on the PUC-approved plan for the sale of Duquesne's ownership interest in the Ft. Martin Power Station, Duquesne has increased its nuclear decommissioning funding by $5 million. The sale of Ft. Martin was completed on October 31, 1996 and so began the increased nuclear decommissioning funding. In 1996, the additional funding was approximately $1 million for the months of November and December for a total of $5 million in nuclear decommissioning funding.

Explanation 15 - Account 404, Amortization of Limited Term Electric Plant, decreased 10% or $880,365:

Duquesne has recently completed the relocation of its corporate offices into more cost-effective space. This relocation spanned several years. During 1996, Duquesne exited one floor of its former building and, accordingly, wrote off $216,417 of leasehold improvements related to this floor. In 1995, Duquesne wrote off $1,121,782 related to the sub-lease of four floors. The decrease in the account is due to this decrease in write-offs.

Explanation 16 - Account 405, Amortization of Other Electric Plant, increased 100% or $10,046,549:

The Amortization of Other Electric Plant account is mainly comprised of amortization of deferred rate synchronization costs (or early window costs).

During 1996, Duquesne expensed $9 million related to the depreciation portion of deferred rate synchronization costs in conjunction with the Ft. Martin Plan approved by the PUC on May 23, 1996. Also, the PUC approved the amortization of the remaining deferred rate synchronization costs over a 10-year period once the property (Ft. Martin) had been transferred to the new owner. On October 31 1996, the Ft. Martin sale was completed and Duquesne began to amortize the remaining costs. In November and December 1996, Duquesne amortized a total of $703,000.

Explanation 17 - Account 406, Amortization of Electric Plant Acquisition Adjustments, decreased 67% or $707,160:

Prior to 1985, Duquesne depreciated its fixed assets at a functional level (by: steam generation, transmission, and distribution). In a subsequent year, the decision was made to switch to a much lower level (by: station) of depreciation because of the difference in estimated useful lives. Existing accumulated depreciation balances were allocated

between each station on a rational basis net of any estimated salvage value. Duquesne wrote-off the estimated salvage value, related to the change in calculating depreciation, based on the 1989 FERC audit. Later in May 1991, the PUC required Duquesne to record an asset for the salvage value because the change in the accumulated depreciation balances had not been previously approved by the PUC. Duquesne began amortizing the asset over a five year period which ended in May 1996. Accordingly, the decrease in the account relates to a full year of amortization recorded in 1995 versus only 4 months recorded in 1996.

Explanation 18 - Account 407, Amortization of Property Losses, decreased 45% or $6,997,715:

During the third quarter of 1996, Duquesne completed recovery of its investment in Perry Unit 2, the construction of which was abandoned by Duquesne in 1986. Accordingly, the 1995 amortization reflects an entire year of expense at $15.5 million whereas, 1996 reflects approximately 7 months of expense at $8.5 million.

Explanation 19 - Account 408, Taxes Other Than Income Taxes, decreased 2% or $1,724,441:

Taxes Other Than Income Taxes decreased in 1996 as compared to 1995 due to two primary reasons, as follows. First, the PA gross receipts taxes were less since Duquesne collected less revenue in 1996 due to the unseasonably warm summer temperatures in 1995. Second, public utility realty taxes reduce as the tax basis reduces. In 1996, the tax was lower by $474,000 for the year as compared to 1995.

Explanation 20 - Account 409, Provision For Income Taxes, Federal & State, decreased 5% or $6,043,556:

The decrease in 1996 federal and state income taxes as compared to the 1995 taxes is the result of lower taxable income in 1996.

Explanation 21 - Account 411, Gain From Disposition of Utility Property, increased 32% or $55,238:

The EPA withholds a certain amount of each utility's emission allowances, to maintain a market in which the allowances may be bought and sold. The EPA then sells the allowances and forwards the funds to the respective utility. The ultimate receipt of funds by Duquesne depends on market conditions. In 1996 and 1995 the EPA withheld and sold approximately 760 emission allowances for DLC, resulting in gains of $226,313 and $171,075, respectively.

Explanation 22 - Account 419, Interest and Dividend Income, increased 54% or $4,293,013:

Interest revenues increased due to the fact that Duquesne's average cash balance was significantly greater in 1996 than in 1995 and could be invested in short-term investments. Some of the reasons for the increase in cash are as follows: Duquesne received $169.1 million in cash for the sale of Ft. Martin in October 1996 and Duquesne Capital issued Monthly Income Preferred Securities in May 1996 for $150 million.

Explanation 23 - Account 419, Allowance For Other Funds Used During Construction, decreased 100% or $720,865:

Duquesne calculates its capitalization rate for the Allowance for Funds Used During Construction (AFC) based on the amount of debt and/or equity that is needed to pay for construction work in progress. Duquesne's short-term debt increased in the third quarter of 1995 in connection with a lease investment and subsequently there was not a need to utilize equity funding for construction in 1996. As a result, equity AFC was -0- in 1996.

Explanation 24 - Account 421, Miscellaneous Non-Operating Income, increased 63% or $10,710,996:

In comparing 12/31/96 to 12/31/95, Miscellaneous Non-Operating Income increased $10.7 million due to an energy-related lease investment made in the third quarter of 1995.

Explanation 25 - Account 421, Miscellaneous Non-Operating Income, decreased 40% or $3,012,103:

The decrease in Miscellaneous Non-Operating Deductions is due to a $4 million write-off in 1995 related to indigent customer accounts. This write-off was in excess of the amount currently being collected by Duquesne through the ratemaking process and accordingly was charged below-the-line. There was no corresponding write-off during 1996.

Explanation 26 - Account 426, Miscellaneous, decreased 8% or $1,227,176:

The Miscellaneous income deduction account is primarily made up of donations for civic, political, and educational institutions. The decrease in the account relates primarily to an IRS settlement in 1995 in which the company paid $1 million. In addition there were canceled construction projects in 1995 amounting to approximately $1 million. These decreases were partially offset by increased donations of approximately $800 thousand to Carlow College, Holy Family Institute, The Pittsburgh Zoo, Robert Morris College, WQED Pittsburgh (Radio Station), Young Women's Club of America of Pittsburgh, and other various organizations.

Explanation 27 - Account 409, Income Tax, Other Income & Deductions, Federal & State, increased 9220% or $57,162,098:

There was a $57.2 million increase in taxes on other income and deductions from year end 1995 to 1996. As a result of the sale of Ft. Martin Power Station in October 1996, Duquesne received $169.1 million in cash and recognized a gain of approximately $130 million. The taxable gain was recorded in taxes on other income. Note that the gain was offset by a write-down of Duquesne's nuclear power plant assets.

Explanation 28 - Account 411, Deferred Income Tax - Other Income & Deductions, Federal & State, increased 100% or $57,740,386:

There was a $57.7 million increase in deferred taxes on other income and deductions from year end 1995 to 1996. As a result of the sale of Ft. Martin Power Station in October 1996, Duquesne wrote-off the Ft. Martin plant asset and reversed the deferred taxes. Note that the gain was offset by a write-down of Duquesne's nuclear power plant assets which resulted in a further reduction in deferred taxes.

Explanation 29 - Account 420, Investment Tax Credits, increased 197% or $1,142,182:

The increase in investment tax credits can be attributed primarily to the write-off of the remaining ITC balance of $1.1 million associated with the sale of Ft. Martin in October 1996.

Explanation 30 - Account 427, Interest on Long-Term Debt, decreased 7% or $6,634,608:

Interest on Long-Term Debt decreased principally due to the retirement of long-term debt during 1995. Also, Duquesne paid down principal related to a current maturity of $50 million in May 1996.

Explanation 31 - Account 431, Other Interest Expense, increased 269% or $6,994,726:

Increase in Other Interest can be attributed to the interest expense related to the $150 million of Monthly Income Preferred Securities issued by Duquesne Capital in May 1996. $8 million was paid in dividends to the unaffiliated limited partners.

Explanation 32 - Account 432, Allowance For Borrowed Funds Used During Construction, increased 64% or $485,678:

Duquesne calculates its capitalization rate for the Allowance for Funds Used During Construction based on the amount of debt and/or equity needed to pay for construction work in progress. Duquesne's short-term debt increased in the third quarter of 1995 in connection with a lease investment and subsequently there was not a need to utilize equity funding for construction in 1996. This debt increase resulted in a shift from equity to debt AFC.

DUQUESNE LIGHT COMPANY

A.- Summary of Filing

6. Provide a summary of base year adjustments which sets forth the effect of the adjustment upon the following: operating revenues, operating expenses, taxes other than income taxes, operating income before income taxes, state income tax, federal income tax and income available for return. In addition, base year adjustments shall be presented on the basis of the major account categories.

Response:

See attached.

DUQUESNE LIGHT COMPANY
Cost of Service Functionalization
For the Year Ended December 31, 1996

ADJUSTMENTS

Adj #	Operating Revenues	Operating Expenses	Taxes Other Than Income Taxes	Operating Income Before Income Taxes	State Income Taxes	Federal Income Taxes	Income Available For Return
1	$9,214,000			$9,214,000	$858,542	$2,924,410	$5,431,048
2	40,749,185			40,749,185	3,796,929	12,933,290	24,018,966
3	(841,609)			(841,609)	(78,419)	(267,116)	(496,074)
4		1,236,568		(1,236,568)	(115,221)	(392,471)	(728,876)
5		1,525,592		(1,525,592)	(142,152)	(484,204)	(899,236)
6		778,929		(778,929)	(72,579)	(247,222)	(459,128)
7		4,527,073		(4,527,073)	(452,255)	(1,426,186)	(2,648,632)
8				0	0	(19,665,341)	19,665,341
9		(8,471,653)		8,471,653	846,318	2,668,867	4,956,468
10	2,635,051			2,635,051	245,529	836,333	1,553,189
11		65,024,531		(65,024,531)	2,246,237	(34,860,832)	(32,409,936)
12	(23,454,749)	1,977,916	(4,352,878)	(21,079,787)	(2,132,222)	(6,631,648)	(12,315,917)
13		(353,580)		353,580	35,323	111,390	206,867
14		434,667		(434,667)	(40,501)	(137,958)	(256,208)
15				0			
	$28,301,878	$66,680,043	($4,352,878)	($34,025,287)	$4,995,528	($44,638,690)	$5,617,872

The adjustments above are base year adjustments to the Cost of Service study in M.K. O'Brien's testimony.

DUQUESNE LIGHT COMPANY

A.- Summary of Filing

7. If the utility's operations include non-jurisdictional activities, provide a schedule which demonstrates the manner in which rate base and operating income data have been adjusted to develop the jurisdictional base year.

Response:

Please see Morgan O'Brien's testimony.

DUQUESNE LIGHT COMPANY

Revenue Requirements

1) Provide all work papers and supporting documentation showing the development of the base year revenues. Provide work papers and supporting documentation in sufficient detail to allow alternative calculations of base year revenues at various rates of return. Explain how the number of customers and usage per customer were derived.

Response:

Please refer to the testimony of J.A. Lahtinen.

DUQUESNE LLIGHT COMPANY

Revenue Requirements

2) Identify the actual number of customers by rate schedule for the preceding two (2) calendar years and include monthly data for the most recent 12-month period.

Response:

See attached schedule.

Schedule A

Item No: 8-2
Page 2 of 3

Number and Title of Rate Schedule	Average Number of Customers 1995	Dec 96 Cust's	Nov-96 Cust's	Oct-96 Cust's	Sep-96 Cust's	Aug-96 Cust's	Jul-96 Cust's	Jun-96 Cust's	May-96 Cust's	Apr-96 Cust's	Mar-96 Cust's	Feb-96 Cust's	Jan-96 Cust's
RA	2,691	2,834	2,831	2,831	2,814	2,806	2,795	2,787	2,785	2,770	2,763	2,753	2,752
RS	496,287	496,925	496,528	495,957	495,442	495,273	495,139	495,352	495,877	496,377	497,544	497,565	497,376
RH	22,707	22,815	22,764	22,718	22,705	22,681	22,639	22,636	22,683	22,720	22,784	22,818	22,784
SM-R	211	199	199	199	201	201	201	202	202	204	205	206	206
TOT RESIDENTIAL	521,896	522,773	522,322	521,705	521,162	520,961	520,774	520,977	521,547	522,071	523,296	523,342	523,118
GMH-S	1,762	1,808	1,807	1,801	1,795	1,792	1,792	1,788	1,786	1,787	1,785	1,789	1,777
GMH-S12	0	0	0	0	0	0	0	0	0	0	0	0	0
GMH-L	1,519	1,515	1,515	1,517	1,513	1,513	1,512	1,510	1,516	1,521	1,521	1,526	1,526
GMH-L-12	3	2	2	2	2	2	2	2	2	2	2	3	3
GS	16,318	16,045	16,020	16,020	16,063	16,048	16,040	16,055	16,051	16,086	16,187	16,203	16,170
GS-12	16	17	17	17	17	17	17	17	17	17	17	17	17
GM-S	22,819	23,233	23,196	23,136	23,111	23,099	23,080	23,054	23,041	23,015	22,914	22,902	22,917
GM-S-12	108	115	115	116	115	115	114	111	110	109	109	109	109
GM-L	10,207	10,343	10,330	10,316	10,290	10,277	10,260	10,258	10,251	10,234	10,230	10,224	10,233
GM-L-9	0	0	0	0	0	0	0	0	0	0	0	0	0
GM-L-12	81	82	82	82	82	82	82	82	82	82	82	82	82
GM-L-13	6	8	7	7	7	7	8	8	8	7	7	7	6
GL	452	451	451	449	449	451	453	452	453	452	452	453	453
GLH	95	98	98	98	97	97	97	97	97	95	94	93	93
L	13	13	13	13	13	13	13	13	13	13	13	13	13
SM-C	337	326	327	327	329	330	331	331	332	335	336	335	335
SR-C	0	0	0	0	0	0	0	0	0	0	0	0	0
TOT COMMERCIAL	53,736	54,056	53,980	53,901	53,883	53,843	53,801	53,778	53,759	53,755	53,749	53,756	53,734

Number and Title of Rate Schedule	Average Number of Customers 1995	Dec 96 Cust's	Nov-96 Cust's	Oct-96 Cust's	Sep-96 Cust's	Aug-96 Cust's	Jul-96 Cust's	Jun-96 Cust's	May-96 Cust's	Apr-96 Cust's	Mar-96 Cust's	Feb-96 Cust's	Jan-96 Cust's
GM	1,720	1,729	1,730	1,730	1,731	1,729	1,729	1,728	1,729	1,726	1,729	1,724	1,722
GM-8	13	9	9	10	10	10	10	10	10	11	11	12	12
GM-9	12	10	11	11	11	12	12	12	12	12	11	11	11
GM-13	1	1	1	1	1	1	1	1	1	1	1	1	1
GMH	45	47	46	46	47	47	46	46	45	45	46	46	46
GLH	10	9	9	9	9	9	10	10	10	10	10	10	10
GL	160	160	161	160	159	160	160	159	158	161	161	160	160
GL-8	15	13	13	13	13	13	13	13	13	12	11	11	11
GL-9	14	15	14	14	14	14	14	15	15	16	16	16	16
L	12	13	13	13	13	12	12	12	12	12	12	12	12
L-8	1	0	0	0	0	1	1	1	1	1	1	1	1
L-9	0	0	0	0	0	0	0	0	0	0	0	0	0
C-BL-16	5	4	4	4	4	5	5	5	5	5	5	6	6
C-DL-16	3	4	4	4	4	3	3	3	3	3	3	3	3
HVPS	3	4	3	3	3	3	3	3	3	3	3	3	3
IND LESS BAS LRG	2,010	2,014	2,014	2,014	2,015	2,015	2,015	2,014	2,013	2,014	2,016	2,012	2,010
TOTAL BASIC LRG	4	4	4	4	4	4	4	4	4	4	4	4	4
TOTAL INDUSTRIAL	2,014	2,018	2,018	2,018	2,019	2,019	2,019	2,018	2,017	2,018	2,020	2,016	2,014
PITCAIRN RESALE	1	1	1	1	1	1	1	1	1	1	1	1	1
SM	185	184	184	184	184	184	184	184	184	184	184	184	185
AL	0	2	2	2	2	2	2	2	1	1	1	1	1
SE	1	1	1	1	1	1	1	1	1	1	1	1	1
SH	13	14	14	14	14	14	14	14	14	14	14	14	13
MTS	1,681	1,690	1,689	1,690	1,688	1,683	1,684	1,684	1,685	1,681	1,681	1,681	1,681
TOT ST & HWY LTG RATE REF	1,880	1,891	1,890	1,891	1,889	1,884	1,885	1,885	1,885	1,881	1,881	1,881	1,881
TOTAL SALES	579,527	580,739	580,211	579,516	578,954	578,708	578,480	578,659	579,209	579,726	580,947	580,996	580,748

DUQUESNE LIGHT COMPANY

Revenue Requirements

3) Provide a breakdown of actual kilowatt hour sales by rate schedule for each month of the 12-month period immediately preceding the base year showing annual totals and for each subsequent month of the base year for which data are available.

Response:

See attached schedules.

Schedule A

Item No: B-3
Page 2 of 3

Number and Title of Rate Schedule	KW-Hrs 1996	Dec 95 KW-Hrs	Nov-95 KW-Hrs	Oct-95 KW-Hrs	Sep-95 KW-Hrs	Aug-95 KW-Hrs	Jul-95 KW-Hrs	Jun-95 KW-Hrs	May-95 KW-Hrs	Apr-95 KW-Hrs	Mar-95 KW-Hrs	Feb-95 KW-Hrs	Jan-95 KW-Hrs
RA	2,793	2,743	2721	2,710	2,704	2,692	2,680	2,679	2,679	2,676	2,675	2,670	2,662
RS	496,280	497,148	496,787	496,058	495,607	495,538	495,356	495,557	495,633	496,175	497,054	497,279	497,252
RH	22,729	22,824	22,769	22,684	22,662	22,665	22,665	22,649	22,694	22,695	22,707	22,741	22,733
SM-R	202	207	207	208	210	210	210	211	212	214	214	215	216
TOT RESIDENTIAL	522,004	522,922	522,484	521,660	521,183	521,105	520,911	521,096	521,218	521,760	522,650	522,905	522,863
GMH-S	1,792	1,773	1,768	1,767	1,771	1,749	1,747	1,753	1,761	1,764	1,772	1,761	1,755
GMH-S12	0	0	0	0	0	0	0	0	0	0	0	0	0
GMH-L	1,517	1,519	1,519	1,525	1,520	1,533	1,528	1,528	1,526	1,511	1,510	1,503	1,501
GMH-L-12	2	3	3	3	3	3	3	3	3	3	3	3	3
GS	16,082	16,220	16,220	16,187	16,264	16,262	16,297	16,429	16,462	16,480	16,506	15,879	16,615
GS-12	17	17	17	17	17	17	17	17	16	16	16	15	15
GM-S	23,058	22,920	22,901	22,838	22,832	22,817	22,795	22,785	22,749	22,717	22,667	23,275	22,533
GM-S-12	112	109	108	108	108	108	108	108	108	108	107	108	108
GM-L	10,271	10,228	10,221	10,204	10,204	10,212	10,216	10,218	10,215	10,195	10,181	10,194	10,201
GM-L-9	0	0	0	0	0	0	0	0	0	0	0	0	0
GM-L-12	82	82	82	82	82	81	81	81	81	81	81	81	81
GM-L-13	7	6	6	6	6	6	6	6	6	6	6	6	6
GL	452	453	456	458	455	453	455	454	451	450	449	446	441
GLH	96	93	93	93	94	95	94	96	95	95	96	96	96
L	13	13	13	13	13	13	13	13	13	13	13	13	13
SM-C	331	336	336	336	336	336	337	337	338	338	338	337	338
SR-C	0	0	0	0	0	0	0	0	0	0	0	0	0
TOT COMMERCIAL	53,832	53,772	53,743	53,637	53,705	53,685	53,697	53,828	53,824	53,777	53,745	53,717	53,706

Number and Title of Rate Schedule	KW-Hrs 1996	Dec 95 KW-Hrs	Nov-95 KW-Hrs	Oct-95 KW-Hrs	Sep-95 KW-Hrs	Aug-95 KW-Hrs	Jul-95 KW-Hrs	Jun-95 KW-Hrs	May-95 KW-Hrs	Apr-95 KW-Hrs	Mar-95 KW-Hrs	Feb-95 KW-Hrs	Jan-95 KW-Hrs
GM	1,728	1,724	1,722	1,714	1,713	1,713	1,714	1,715	1,720	1,725	1,723	1,724	1,733
GM-8	10	12	12	12	13	13	13	15	13	13	13	12	12
GM-9	11	11	10	10	10	12	12	12	12	12	12	13	13
GM-13	1	1	1	1	1	1	1	1	1	1	1	1	1
GMH	46	46	46	46	45	45	45	45	45	44	45	44	44
GLH	10	10	10	10	10	10	10	10	10	10	10	10	10
GL	160	159	159	159	160	161	162	161	159	159	161	161	160
GL-8	12	13	16	16	15	15	14	14	16	16	15	16	16
GL-9	15	15	15	13	15	15	15	15	14	14	14	13	14
L	12	12	12	12	12	12	12	12	12	12	12	12	12
L-8	1	1	1	1	1	1	1	1	1	1	1	1	1
L-9	0	0	0	0	0	0	0	0	0	0	0	0	0
C-BL-16	5	5	5	5	5	5	5	5	5	5	5	6	5
C-DL-16	3	3	3	3	3	3	3	3	3	3	3	3	3
HVPS	3	3	3	3	3	3	3	3	3	3	3	3	3
IND LESS BAS LRG	2,014	2,011	2,011	2,001	2,002	2,005	2,006	2,008	2,010	2,014	2,014	2,015	2,023
TOTAL BASIC LRG	4	4	4	4	4	4	4	4	4	4	4	4	4
TOTAL INDUSTRIAL	2,018	2,015	2,015	2,005	2,006	2,009	2,010	2,012	2,014	2,018	2,018	2,019	2,027
PITCAIRN RESALE	1	1	1	1	1	1	1	1	1	1	1	1	1
SM	184	185	185	185	185	185	185	185	184	184	184	184	185
SL	2	1	0	0	0	0	0	0	0	0	0	0	0
SE	1	1	1	1	1	1	1	1	1	1	1	1	1
SH	14	13	13	13	13	13	13	13	13	13	13	13	13
MTS	1,685	1,681	1,681	1,682	1,681	1,679	1,678	1,680	1,680	1,680	1,681	1,684	1,682
TOT ST & HWY LTG RATE REF	1,886	1,881	1,880	1,881	1,880	1,878	1,877	1,879	1,878	1,878	1,879	1,882	1,881
TOTAL SALES	579,741	580,591	580,123	579,184	578,775	578,678	578,496	578,816	578,935	579,434	580,293	580,524	580,478

DUQUESNE LIGHT COMPANY

C. - Summary of Filing

1. Provide a breakdown of Federal Energy Regulatory Commission Account 926, Employee Benefits by benefit program or plan for the base year.

Response:

See Schedule A attached.

Schedule A

FERC Account 926 Employee Benefits 1996

Hospitalization and Life Insurance Premiums	$ 10,835,182.53
Pensions	7,563,410.41
SFAS 106 Accrual	4,963,729.55
Pension Plan Administrator	391,649.69
Tuition Reimbursements	362,824.86
401(k) Administrator	214,820.79
Welfare Plan Administrator	117,525.25
401(k) Record Keeping	108,140.01
Other	102,644.34
Welfare Payments	62,159.49
Long-Term Disability	60,033.38
401(k) Audit	37,508.90
Drug Testing	35,420.61
Employee Assistance Program	29,404.44
FSA/COBRA Administration	26,181.49
Supervisory Association	25,138.10
Review of Medical Bills	11,124.41
Business Travel Insurance	622.51
Medical Fee	536.70
Amount Billed to CAPCO Companies	(12,222,540.51)
TOTAL	$12,725,516.95

DUQUESNE LIGHT COMPANY

C. - Summary of Filing

2. Provide the base year level of each of the following which is included in the company's cost of service by separate type and/or payee, which were paid by the company directly or which were allocated or billed to the company by affiliates or its parent company:

(a) Fines and penalties
(b) Contributions and donations
(c) Membership dues
(d) Lobbying expense
(e) Employee activity costs (e.g., picnic, parties, awards)
(f) Investor relations expenses

Response:

(a) Fines and penalties
Total for 1996 is $-0-

(b) Contributions and donations
Total for 1996 is $1,606,873. See Schedule A attached.

(c) Membership dues
Total for 1996 is $2,123,772. See Schedule B attached.

(d) Lobbying expenses
Total for 1996 is $439,967. See Schedule C attached.

(e) Employee activity costs.
Total for 1996 is $21,155. See Schedule D attached.

(f) Investor relations expenses
Total for 1996 is $359,282.

1996 Donations

ACIL 1996 Environmental Conference	$15,000
Allegheny County League of Women Voters	1,000
Allegheny General Hospital Auxiliary	5,000
Allegheny Policy Council	15,000
Allegheny Trails Council (Boy Scouts)	100
American Ireland Fund	2,000
American Jewish Committee	2,500
American Red Cross	2,500
ARC-Allegheny Foundation	10,000
Associated Artists of Pgh.	2,000
B. F. Jones Memorial Library	10,000
B'nai B'rith Foundation of the U.S.	2,000
Beaver Area Heritage Foundation	5,000
Beaver County Educational Trust	(3,334)
Boy Scouts of America	6,000
Boy Scouts of Am.-Scouting for Food	2,500
CCAC Education Foundation	5,000
Carnegie, The	15,000
Carlow College	100,000
Catholic Charities	5,000
Chatham College	15,000
Cities In Schools	50,000
Civic Light Opera	35,500
Extra Mile Education Foundation	30,000
Girl Scouts of Southwestern Penna.	25,000
Girls Hope of Pittsburgh, Inc.	5,000
Gr. Pgh. Council	7,500
Gr. Pgh. Literacy Council	10,000
Hand In Hand, Inc.	650
Historical Society of Western PA	45,500

1996 Donations

Holy Family Institute	110,000
Housing Opportunities	20,000
Housing Opportunities of Beaver County	5,000
Jewish National Fund	3,000
Juvenile Diabetes Foundation	13,250
Ladies of the Grand Army of the Republic Home	5,000
LaRoche College	5,000
Magee Women's Hospital	1,000
McGuire Memorial Foundation	5,000
Mendelssohn Choir of Pgh.	1,000
Miryam's	15,000
Negro Educational Emergency Drive	5,700
National Kidney Foundation	7,500
National Women's Economic Alliance Foundation	1,500
Pennsylvania Economy League	1,500
Pennsylvania Electric Association	5,700
Pittsburgh Blind Association	10,750
Pittsburgh Center for the Arts	5,000
Pittsburgh Council for International Visitors	500
Pittsburgh Federation for Events & Promotion	7,709
Pittsburgh High Technology Council	10,000
Pittsburgh Public Theatre	12,980
Pittsburgh Regional Alliance	25,000
Pittsburgh Symphony Society	20,000
Pittsburgh Theological Seminary	5,000
Pittsburgh Zoo	33,000
Poise Foundation	12,500
Price Waterhouse L.P.	1,500
Program for Female Offenders, Inc.	5,000

1996 Donations

Rehabilitation Institute (The)	1,000
Rensselaer Polytechnic Institute	33,333
River City Brass Band	6,000
Robert Morris College	51,200
St. Barnabas Charitable Foundation	10,000
St. Francis Health Foundation	28,000
Salvation Army	12,650
Three Rivers Area Labor Management Committee	5,000
Three Rivers Youth for Home Improvement	2,500
Traveler's Aid Society of Pittsburgh	1,000
U.S. Olympic Committee	1,000
United Way Day of Caring	10,000
University of Pittsburgh	2,550
Vietnam Veterans Leadership Program	1,000
Vocational Rehabilitation Center	2,500
WQED Pittsburgh	100,000
Western Pennsylvania Caring Foundation	800
Western PA Conservancy	12,500
Women's Center & Shelter of Gr. Pgh.	10,000
World Affairs Council of Pittsburgh	1,000
Youthworks	20,000
YMCA of Pgh.	2,500
YWCA of Pgh.	85,000
Other	426,834
TOTAL	$1,606,873

SCHEDULE B

Item No: C-2
Page 5 of 8

1996 Membership Dues

VENDOR NAME	AMOUNT
INSTITUTE OF NUCLEAR MATERIALS MANAGEMENT	$726,852
NUCLEAR ENERGY INSTITUTE	390,632
EDISON ELECTRIC INSTITUTE	347,133
PA ELECTRIC ASSOCIATION	105,471
EPRI MONITORING & DIAGNOSTICS CENTER	94,500
ACURI ASSOCIATION	36,844
PENN'S SOUTHWEST ASSOCIATION	70,000
PENNSYLVANIA STATE UNIVERSITY	29,129
PENNSYLVANIA ECONOMY LEAGUE	29,000
PENNSYLVANIA BUSINESS ROUND TABLE	24,000
PENNSYLVANIA COAL ASSOCIATION	22,856
GREATER PITTSBURGH CHAMBER OF COMMERCE	20,907
DINAMO (Organization to keep rivers open, locks up to date)	20,000
NATIONAL MINING ASSOCIATION	15,236
NATIONAL CASH MANAGEMENT ASSOCIATION	13,616
PENNSYLVANIA CHAMBER OF COMMERCE	12,543
PLG, INC. (Membership - "Riskman Technology Group")	12,500
ASSOCIATION OF EDISON ELECTRIC ILLUMINATING CO.	10,356
VECTRA TECHNOLOGIES (Membership & Initiation fee)	10,000
AMERICAN NATIONAL STANDARDS INSTITUTE	8,174
PRMPC (Memb. dues ("Pennsylvania Regional Management Purchasing Council")	6,550
BETTER BUSINESS BUREAU OF WESTERN PA	6,262
LOCAL GOVERNMENT ACADEMY	5,000
PITTSBURGH DOWNTOWN PARTERSHIP	5,000
THE DUQUESNE CLUB	4,455
DUQUESNE UNIVERSITY ("Pgh. Supplier Training Center Membership in Prof. Purchasing Dept.")	3,500
ELECTRIC UTILITY COST GROUP	2,750
MON-YOUGH CHAMBER OF COMMERCE	2,266
NUCLEAR UTILITY SOFTWARE MANAGEMENT GROUP	2,250
FRAMATOME TECHNOLOGIES (1996 dues" Power Radiation Protection/ALARA committee")	2,000
AIRPORT CORRIDOR TRANSPORTATION ASSOC.	2,000
WORLD TRADE CENTER OF PITTSBURGH	2,000
AUTOMATED MAPPING/FACILITIES MANAGEMENT INTERNATIONAL	1,950

1996 Membership Dues

PURCHASING MANAGEMENT ASSOCIATION OF PGH.	1,900
HISTORICAL SOCIETY OF WESTERN PA	1,879
WILDLIFE HABITAT ENHANCEMENT COUNCIL	1,750
ALLEGHENY COUNTY BAR ASSOCIATION	1,670
NUCLEAR UTILITY PROCUREMENT ISSUES COMMITTEE.	1,600
INTERMAT -(Memb. Dues -"International Material Management Engineers")	1,550
BUILDING OWNERS AND MANAGERS ASSOCIATION OF PITTSBURGH	1,125
BEAVER COUNTY CHAMBER OF COMMERCE	1,070
LAWYER ASSESSMENT ADMINISTRATION OFFICE OF PA COURTS	1,050
THE SECURITIES TRANSFER ASSOCIATION, INC.	1,034
WESTERN PENNSYLVANIA CONSERVANCY	1,000
GREATER PITTSBURGH HOTEL ASSOCIATION	1,000
OTHER	61,412
TOTAL	$2,123,772

1996 Lobbying Expenses

Street Lighting Grants	$285,662.40
Employee Expenses	92,767.15
Nuclear Energy Institute Dues	25,119.00
Office Rental	12,333.00
Transportation	11,726.17
Temporary Labor	7,695.96
Consultants	1,795.21
Utilities	1,476.99
Materials Purchased	1,189.65
Computer Equipment	157.94
Mobile Phones	43.87
	$439,967.34

Schedule D

Item No: C-2

1996 Employee Activity Costs

Anniversary service awards	$15,281
Retirement plaques	5,874
	$21,155

DUQUESNE LIGHT COMPANY

C. - Summary of Filing

3. Provide the cost of outside services employed during the base year. Include in your response a breakdown of the base year amount indicating the service provider and the type of service performed.

Response:

See attached Schedules A and B.

Schedule A

Outside Services

PAGE 1

VENDOR		SUM JE AMOUNT
9715	BECHTEL CORP.	20,656,941.25
9627	WESTINGHOUSE	11,916,408.94
F365	LEWIS TREE SE	8,430,468.52
1433	BURNS INTERNA	4,979,251.59
0554	THE BABCOCK &	4,359,763.67
0926	BARTLETT NUCL	3,557,020.22
8048	SCIENTIFIC EC	1,806,123.74
9078	TRUMBULL CORP	1,763,434.27
B348	FOSTER WHEELE	1,645,142.16
5081	LEBOEUF, LAHB	1,458,202.04
8678	PAYCO AMERICA	1,106,794.60
D128	G. D. BARRI &	1,092,489.50
G547	DYNUN-NELSON	1,075,716.30
8013	TAD ENERGY SE	847,074.63
3711	FERN VALLEY I	810,918.60
8570	STONE & WEBST	721,587.72
G191	ROSS & HARDIE	669,527.58
6204	HALLIBURTON N	656,959.75
7708	SKADDEN, ARPS	631,435.36
4818	KIRKPATRICK &	579,533.94
1353	CAULEY DETECT	558,090.93
B760	ALEXSIS, INC.	551,260.06
1884	CONSERVATION	543,543.71
C685	TRACE SERVICE	524,320.81
1847	CHEM-NUCLEAR	489,519.82
8026	SHAW, PITTMAN	449,455.18
4754	CAMBRIDGE REP	448,375.18
6444	NATIONAL INSP	404,464.93
D896	A.C.R.T., INC.	402,447.77
4236	HYDRO TECHNIC	370,883.55
G632	QSC PAINTING	366,756.52
4512	INTERSTATE NU	344,229.71
G332	C. & K. INDUS	334,864.43
A016	ITI HOVATS, I	327,858.32
4387	IBM BRANCH SP	325,606.34
F429	TODD & SILVER	321,450.03
D276	UNITED SCIENC	320,115.02
Z758	HORACE COFER	312,419.10
9868	ZETEC, INC.	302,934.80
D911	LANTEK COMPUT	295,927.04
7229	POWER SAFETY	279,121.76
7812	ST. GEORGE GR	275,540.47
D599	THE NORTHBRID	273,065.04
3556	GPS TECHNOLOG	272,540.54
8141	SKUTSKI & OLT	268,442.08
[illegible]	MASTER-LEE EN	264,026.41
[illegible]	PNR AND ASSOC	262,300.00
5343	KIRKWOOD CONS	258,240.77
A894	DEPAUL & ASSO	246,321.21
5795	MELLON BANK,	245,329.44
5348	MPW INDUSTRIA	233,879.54
0976	SULZER BINGHA	223,116.32

Note: See Schedule B for the description of services performed for each vendor over $100,000.

VENDOR		SUM SUM AMOUNT
F126	DAVIS REILLY	221,865.83
3972	HEIDRICK AND	203,941.92
7399	REED SMITH SH	198,620.72
4578	ITRON, INC.	196,717.47
A188	KCS TRAINING	188,683.75
B017	PCX CONSULTIN	186,367.64
3894	DELOITTE & TO	184,990.16
2197	THE CREDIT BU	184,950.86
5565	MCKAMISH CHES	180,079.46
7152	PITTSBURGH MA	178,975.40
2175	CRANE CO.	178,879.23
8493	TELEDYNE ISOT	178,237.63
9738	WYLE LABS	178,172.16
6570	OXFORD DEVELO	175,722.18
3565	ELECTRO-MEC	175,328.43
8141	SKUTSKI & ASS	175,231.60
9448	WEAVERTOWN TR	167,998.15
5366	INTEGRATED PL	165,272.29
4818	KIRKPARTICK &	162,905.58
D311	CDS CONSULTIN	162,104.59
3012	JOSEPH B. FAY	155,924.49
C381	BUSINESS ALTE	150,388.57
2932	DIAMOND STATE	147,597.79
Z043	PICKARD, LOWE	144,458.67
2164	CRAIN BROTHER	143,666.15
0483	VANCE WRIGHT	142,413.34
Z359	VIRGINIA CORP	137,222.00
0207	ALLEGHENY BUS	133,014.74
4369	INGERSOLL-RAN	132,866.04
6693	JOSE & WIEDIS	132,816.45
1310	R. J. BROWN T	126,352.54
Z912	PIER	122,831.24
B967	HAMON POWER S	120,345.27
1981	COLT INDUSTRI	119,396.95
D128	GD BARRI & AS	112,994.93
2760	EICHLEAY ENGI	112,651.11
1227	ARKWRIGHT MUT	111,976.14
1584	CANBERRA INDU	109,996.92
0054	ADVERTISERS A	101,929.85
9923	XEROX CORP.	101,648.47
B405	BARAKAT & CHA	101,489.98
5165	LIKEN SERVICE	101,472.59
B482	MIZRAHI DESIG	101,208.39
0186	ALEXANDER & A	100,197.00
4988	KWASHA LIPTON	99,700.00
A143	ENCORE COMPUT	97,781.45
0451	ARROWHEAD IND	96,926.06
6358	NEW YORK STOC	92,674.00
Z624	KURTZ & ASSOC	92,559.08
A661	MOBILE HEALTH	91,696.35
Z045	HARTLEY, FELT	91,197.56
B567	ALIQUIPPA HOS	89,954.69

Item No: C-3
Witness:
Page 3 of 28

VENDOR	SUM JE	SUM AMOUNT
2437 DICK ENTERPRI		89,398.30
MISC VENDOR		89,103.69
5585 MCCARLS, INC.		89,038.08
4932 ONSITE ENGINE		88,870.76
4269 INSTITUTE OF		88,766.60
0487 TEAM ENVIRONM		88,686.89
3735 DESBROW & ASS		87,385.81
9852 JOHN W. THROW		87,273.00
8426 STANDARD & PO		86,245.00
2012 COMMONWEALTH		86,106.50
C731 AMBROSE CONSU		82,478.47
0529 COMPUCOM, INC		82,346.72
8096 ST. MARGARET		80,558.48
F274 AM-GARD		80,036.17
A400 ABB POWER T&D		80,026.18
C296 EQUIFAX NATIO		80,013.94
3787 GEO. V. HAMIL		79,752.28
3113 FINANCIAL COL		77,986.90
4167 HEWITT ASSOCI		76,903.92
5483 ENGINE SYSTEM		76,065.78
5239 PETER F. LOFT		75,927.73
A576 PRICE WATERHO		74,837.50
B575 STORAGE TEK		74,451.45
3267 FINCOR DIV.		74,061.12
0270 VORYS, SATER,		72,862.25
2348 DEBALDO BROS.		72,402.03
0465 HALLMARK TASS		71,785.85
8760 ALEXIS		70,707.38
B588 BRADDON, INC.		69,801.75
7545 ROBINSON INDU		69,184.73
1903 COMPU-FIX		68,560.96
D137 PENN CREDIT C		68,258.58
9123 UNIFIRST CORP		68,079.37
9208 UNIVERSITY OF		68,069.57
0582 ALEXSIS, INC.		68,057.82
Z216 LIBERTY TECHN		67,710.35
B222 COMDISCO		66,602.25
4360 INDUSTRIAL RU		66,121.50
B407 CLINICAL PATH		64,629.56
8122 SIMMERS CRANE		64,330.20
A328 MILLAR ELEVAT		64,058.79
2118 COPES VULCAN		63,930.52
F595 PROCESS REPRO		63,593.87
9445 UNITED ENGINE		61,911.24
6805 NATIONAL UNDE		61,814.12
F475 CABLETRON		61,434.20
Z839 SENTCO, INC.		61,231.69
4345 INDUSTRIAL EL		61,144.08
3558 GOODWILL INDU		59,618.48
0620 THE GHW GROUP		59,601.14
6034 MOODY'S INVES		59,050.00
0118 JUDITH M. GRE		58,377.11

Item No: C-3
Witness:
Page 4 of 28

VENDOR		SUM JE	SUM AMOUNT
7256	PSP		58,036.74
G311	MCANNEY, ESPO		57,060.00
7963	REID & PRIEST		56,055.06
F139	PENN PERRY RO		55,026.00
6005	M AND O MARIN		54,596.96
5483	MKW POWER SYS		53,627.55
C784	A TO Z COMMUN		53,586.13
B847	W-SQUARED, IN		52,461.69
9116	PAROCK		52,210.00
8948	TOWERS PERRIN		52,034.00
9639	UNISYS SUPPLI		51,418.81
Z716	ATI CONSULTIN		51,000.00
F180	C & C MARINE		50,847.24
8797	THERMO NUTECH		50,768.95
6079	RICHARD METZL		50,408.36
1685	TIERNEY & PAR		50,000.00
A117	TENERA ENGINE		49,800.00
9532	WEEDS, INC.		49,069.43
D164	OPERATIONS AN		48,939.60
8087	CATHOLIC CHAR		48,871.01
1115	LEGAL MANAGEM		48,763.43
3387	FURMANITE,INC		48,259.15
0607	ALHA ILLERY M		46,643.33
D845	JONES DAY REA		46,618.81
0731	AMERICAN MANA		46,597.11
F114	PALMER & PALM		45,744.74
3112	EPRI		45,205.00
G250	SIEMENS ROLM		45,182.18
Z082	ELECTRONIC SY		45,078.32
4240	THE FIRST NAT		44,856.51
Z162	GLOBEX CORPOR		44,548.53
1320	BROWNING-FERR		44,484.42
4860	WILLIAM M. KN		44,394.25
1243	BENTLY NEVADA		43,816.86
3093	FIRE FIGHTER		43,708.90
G508	GOLF LAWNS		43,610.68
7871	PARKS MOVING		43,324.90
5795	MELLON BANK		43,277.00
8720	DRESSER RAND		43,267.76
D975	CAMCO		42,885.47
8122	SIMMERS ENGIN		41,862.98
8819	3M BUSINESS P		41,193.76
1147	CANNON BOILER		40,628.22
8724	TARGET ROCK C		40,623.25
Z214	PROFESSIONAL		40,513.16
7802	SE TECHNOLOGI		40,146.67
9933	WESTERN PENNS		40,000.00
7071	PRE-CAL SERVI		39,961.25
1208	B M F & R , I		39,934.68
G113	MARSHALL, DEN		39,265.62
G060	ACUMEN		39,256.35
2736	EDISON ELECTR		39,076.86

Item No: C-3
Witness:
Page 5 of 28

VENDOR		SUM SUM JE AMOUNT
Z977	DOYEN AND ASS	39,021.34
C377	CINTAS CORP.	38,692.96
0458	ATWOOD & MORR	38,361.07
5975	NCS CORPORATI	37,622.54
6805	NUS UNDERGROU	37,334.45
D391	CIBER, INC.	37,089.72
4230	GAMMA METRICS	37,056.39
6997	PENNSYLVANIA	36,853.77
A495	ROBERT P. BOZ	36,337.90
G303	VECTRA ENGINE	36,305.14
F968	APPLIED ECONO	36,062.10
2988	SIGD FALK	72,000.00
1163	MRS. DOREEN E	35,925.46
7823	SARGENT & LUN	35,795.81
3479	DQE, INC.	35,491.50
G070	MENTZELL ELEC	35,068.84
B578	THOMAS J. MUR	35,000.00
0348	AMERICAN SCIE	34,964.62
F795	WARWOOD ARMAT	34,515.73
F874	NORTH HILLS C	34,499.12
3416	GRUMMAN AEROS	34,325.98
A819	PACKER ENGINE	34,295.74
F593	EMC ANALYTICA	33,729.32
A943	SE TECHNOLOGI	33,717.03
G055	KASET, INTERN	33,712.25
A175	KONICA BUSINE	33,305.18
Z354	ACCURATE COMP	33,108.20
B359	REEDY ASSOCIA	32,669.20
3255	FITCH INVESTO	32,500.00
2608	DUN & BRADSTR	32,206.50
7109	PROFESSIONAL	32,093.32
F301	BEAVER VALLEY	31,891.66
F302	BEAVER VALLEY	31,821.66
[illegible]532	COSA INSTRUME	31,493.48
[illegible]639	STEEL VALLEY	31,192.86
0280	ARC ASSOCIATE	31,000.63
2583	ELGAR CORP.	30,581.87
Z794	RMF OIL CO (L	30,211.29
Z951	COMPURAD TECH	60,000.00
2707	EASTMAN KODAK	29,818.15
[illegible]730	REFLEX SERVIC	29,703.21
[illegible]244	LENS 14	29,621.16
Z784	PHILIP H. JOH	29,451.74
F676	MUNICIPAL CON	29,294.40
3288	FREEZE SEAL E	29,104.50
4401	INTERGRAPH CO	29,041.98
A951	EQE INTERNATI	28,899.66
2464	BOROUGH OF SH	28,862.04
7819	SARGENT ELECT	28,254.82
1006	BABST CALLAND	28,056.86
G026	INSIGHTS UNLI	28,009.15
7249	ADP PROXY SER	27,819.03

Item No: C-3
Witness:
Page 6 of 28

VENDOR	SUM JE	SUM AMOUNT
Z779 ACRES INTERNA		27,711.45
B837 TRI-VALLEY WA		27,690.84
6321 MR. JOHN OF P		27,688.95
Z851 BENTLEY SYSTE		27,554.76
7591 ROCKWELL INTE		27,502.86
A886 ENSR		27,499.79
3742 ELECTRIC MOTO		27,431.88
Z072 TELEDYNE ENGI		27,330.14
G476 U.S. BOILER S		27,176.50
1372 BUCHANAN INGE		26,962.12
Z982 SYNFINITY TEC		26,834.08
6212 PSYCHOLOGY &		26,575.00
8682 TLG SERVICES,		26,545.00
C731 DELORESE AMBR		26,152.80
D396 AMERICAN BABB		25,946.76
3489 GILBERT/COMMO		25,713.80
1685 PITTSBURGH OP		50,000.00
0726 ASEA BROWN BO		24,969.59
F158 AZAAR TECHNOL		24,934.92
7090 PROJECT SOFTW		24,690.26
F567 FACILITY MANA		24,676.26
D659 MORT HERALD A		24,666.66
7062 PITTSBURGH NA		24,555.97
A536 EPD DESIGN GR		24,540.25
D571 HDS SPECIALTI		24,532.20
B836 POWER DISTRIB		24,355.00
4608 KTA-TATOR, IN		24,204.60
B589 ARAMARK SERVI		24,203.44
Z026 DOMINION ENGI		24,082.16
B721 GEBCO ENGINEE		23,800.73
5013 LABORATORY CO		23,723.54
3451 DIGITAL SYSTE		23,474.06
2646 THE DUQUESNE		23,429.86
7285 USPCI, INC.		23,272.32
Z830 THE WEB GROUP		23,243.28
9914 WYLE LABORATO		23,149.00
D472 PWR SOLUTIONS		23,108.10
4827 KIRBY ELECTRI		23,088.23
2023 CONSOLIDATED		22,886.76
A197 KILLAM ASSOCI		22,748.01
G400 MANAGEMENT DE		22,635.27
B514 WINSTON & STR		22,535.99
G621 J.R. BUTLER A		22,321.28
8180 SAFEMASTERS		22,312.17
B375 THREE RIVERS		22,075.39
9779 URBAN LEAGUE		21,990.00
9322 VICTOREEN, IN		21,894.80
A971 COHEN & GRIGS		21,595.64
9494 STATE STREET		21,450.00
6617 PANASONIC CO.		21,306.00
Z158 THE VANDINE G		21,246.55
D669 THE WEFA GROU		21,037.00

Item No: C-3
Witness:
Page 7 of 28

VENDOR		SUM SUM JE AMOUNT
5749	MEMOREX CORP.	20,985.02
2956	EQUIPMENT & C	20,975.02
7074	PITTSBURGH HI	20,800.00
A667	GRACIANO	20,459.67
A923	CQ, INC.	20,400.00
F960	MCCORKLE MACH	20,386.86
7782	KEEFER, WOOD,	20,187.31
A138	SUNGARD SHARE	20,146.50
G528	POWER MARKETI	20,140.16
G778	WORK TECHNOLO	20,140.00
Z835	STANDISH TECH	20,116.00
4791	KINEMETRICS S	20,039.30
A860	FINANCAIL SEA	20,025.00
2330	DAY AND NIGHT	19,988.91
7348	QUALITY SYSTE	19,941.00
4432	J & M HYDRAUL	19,891.70
A158	NIMS	19,875.00
4074	ION TRACK INS	19,831.17
A403	OLSTEN STAFFI	19,763.71
2212	COMPUTATIONAL	19,200.38
D874	ALFRED R. THO	18,918.48
Z503	STEPHEN SHUMA	18,595.57
D939	CHESTER ENGIN	18,495.97
B867	STERLING SOFT	18,393.75
1338	JOSEPH J. BRU	18,382.94
C008	CHAR SERVICES	18,341.34
1374	BURNHAM INDUS	18,111.71
G754	THRELSCH ENGI	17,825.24
5423	LEHIGH UNIVER	17,817.44
0112	ALLEGHENY LIQ	17,752.75
Z811	ANALYTICAL NU	17,674.91
1980	COMPUTER COMM	17,408.60
3920	HAY GROUP, IN	17,118.55
Z797	GEORGE B. SKI	16,997.00
1458	INACOMP COMPU	16,908.43
C716	RESOURCE DATA	16,852.50
B639	W.G. TUCKER &	16,754.42
A860	THE FINANCIAL	16,692.00
3394	GE CAPITAL MO	16,682.72
A317	PR NEWSWIRE	16,547.39
G367	BULWARK PROTE	16,480.32
D895	ENVIRONMENTAL	16,395.60
G371	SYNERGY CONSU	16,209.76
C204	WEBB, ZIESENH	16,101.38
B374	MARION HILL A	15,960.95
9243	UNITED STATES	15,960.00
Z771	FRAMATOME CON	15,900.00
G673	SENIOR TECHNI	15,810.00
7392	THE REDDY COR	15,769.67
8014	VAN DINE HUMP	15,628.24
1686	NATIONAL COUN	15,600.00
7558	RIGHT ASSOCIA	15,550.00

Item No: C-3
Witness:
Page 8 of 28

VENDOR		SUM JE	SUM AMOUNT
6217	NASH U.S.		15,505.00
B347	SAS INSTITUTE		15,450.74
G095	EGAN & ASSOCI		15,393.66
0967	AMERICAN APPR		15,180.07
B155	ROY F.WESTON		15,167.40
C246	S.D. MYERS		15,138.37
2818	ELMENDORF, IN		15,003.70
685	JOURNAL PUBLI		30,000.00
7399	REED, SMITH,		14,972.06
3431	GENERAL ELECT		14,789.74
1685	RAN PITTSBURG		14,787.00
1686	SCHENLEY HIGH		14,773.00
5334	LEADERSHIP TR		14,700.00
9778	YANNI-BILKEY		14,664.71
536	BARBER-COLMAN		14,532.74
025	RUST UTILITY		14,412.03
Z937	ANALYSTS, INC		14,206.00
F105	UMS GROUP INC		14,157.53
C484	MOOG, INC. IN		14,108.75
Z844	QUALITY PRACT		14,064.29
A401	MARSETTA LANE		14,033.94
B674	PITTSBURGH BU		14,010.75
1686	GIRL SCOUTS O		14,000.00
G731	CATALYST AIR		13,770.00
2060	CONSUMER CRED		13,731.89
1913	COMSTOCK CORP		13,513.30
5969	ROBINSON & AS		13,500.00
F507	SCREENING SYS		13,499.63
2490	CORNING INDUS		13,455.30
F718	CONTROLS LINK		13,413.00
8022	SCIENCE APPLI		13,250.00
3505	V. O. GEORGE		13,158.00
F055	ROBERTS EXPRE		13,112.65
7733	RUMSEY ELECTR		13,109.50
C052	NUCLEAR SECUR		13,100.00
5826	TIM D. MARTIN		13,000.00
9109	U. S. ECOLOGY		12,963.09
G410	LAUREL MOUNTA		12,897.90
7017	OPERATION TEC		12,879.00
0866	BEOWULF CORP.		12,736.42
7131	JACKSON & KEL		12,620.77
2744	CHAMBERS DEVE		12,533.65
6103	NCO FINANCIAL		12,504.56
1658	CONTROLOTRON		12,490.16
5091	THE WALDEC GR		12,274.66
1760	CHASE		12,269.02
9116	PERELSON & WE		12,201.90
Z511	USX ENGINEERS		12,145.00
3407	CORNING CLINI		12,045.35
1340	BRAN & LUEBBE		11,980.00
9116	ARTHUR ANDERS		11,950.00
3280	LEHIGH ENERGY		11,875.00

Item No: C-3
Witness:
Page 9 of 28

VENDOR		SUM JE AMOUNT
Z870	HYDROCHEM IND	11,772.84
C949	AVO INTERNATI	11,757.88
A784	ABC FIRE EXTI	11,747.45
D333	ENTEK SCIENTI	11,730.17
3550	GAI CONSULTAN	11,630.00
G521	EAGLE USA AIR	11,535.17
Z492	MODUMEND	11,503.00
6781	OCE INDUSTRIE	11,422.03
A286	ROBERT B. PEA	11,385.58
B686	AC SERVICE &	11,339.98
0006	ABCO FIRE PRO	11,291.31
F677	JOHNSON EQUIP	11,258.56
F612	DAWN E. HATCH	11,215.75
C327	AEA TECHNOLOG	11,118.00
9619	AVT, INC.	10,994.12
8958	THE TRANE COM	10,863.00
5969	DEPARTMENT OF	10,845.01
C688	AUTOMATED MIC	10,833.51
9179	U.S. DEPARTME	10,703.30
1948	FIRST WESTERN	10,698.48
4715	DAVID KENNEDY	10,693.46
2766	ENGDAHL ENTER	10,674.20
F801	ATLANTIC GROU	10,656.45
6935	KLETT LIEBER	10,564.51
G583	STAHURA INDUS	10,560.82
F169	THEODORE BARR	10,500.00
1686	THREE RIVERS	10,450.00
8561	STOCK EQUIPME	10,435.50
0384	ANALYTICS	10,367.36
4479	INDUSTRIAL SC	10,275.00
6518	OPEX CORPORAT	10,272.00
2440	DIONEX CORP.	10,233.20
Z965	CLEAN-N-BRIGH	10,205.26
D152	THE FUTURE NO	10,184.70
8080	SEALING SPECI	10,115.53
F345	J H MANAGEMEN	60,000.00
G718	NORTH AMERICA	9,996.00
6216	MCCUTCHEON EN	9,949.16
G005	CRANE PRO SER	9,946.25
D154	BANK OF AMERI	9,754.53
Z464	R.J. LEE GROU	9,694.00
8841	TRI-VALLEY EN	9,662.46
1948	PEOPLES BANK	9,647.80
D655	DEWEY & KAYE	9,550.00
2027	CYBEREX, INC.	9,535.00
3188	FLUOROCARBON	9,528.00
5382	PITTSBURGH MA	9,500.00
G208	OPTIMAL TECHN	9,464.96
5849	MERRILL LYNCH	9,399.10
8754	SENIOR ENGINE	9,261.96
9870	WOODWARD GOVE	9,187.60
Z946	MPR ASSOCIATE	9,146.86

/ENDOR		SUM SUM JE AMOUNT
0791	BELL ATLANTIC	9,028.59
A439	ABB C-E SERVI	8,938.89
9617	WESTERN PA. S	8,903.00
7024	PITTSBURGH FE	8,872.67
1760	CHASE MANHATT	8,747.19
5715	FRED KENDERSO	8,704.92
5140	ALIMAK ELEVAT	8,621.56
4415	IRON CITY UNI	8,600.74
C870	BETH FROST EV	8,554.17
Z553	HOWDEN COMPRE	8,539.61
G647	BOSTON EQUISE	8,447.36
1983	COCO TRUCKING	8,352.13
B787	CHESTER LABNE	8,316.77
2543	DIS INDUSTRIA	8,304.00
4400	GANNETT FLEMI	8,271.64
1686	BIG BEAVER FA	8,252.00
Z910	HOWDEN FAN CO	8,247.97
6795	PENNSYLVANIA	8,237.24
2851	ENGINEERED PR	8,160.00
G224	SCHNEIDER DOW	8,143.44
Z688	NORTH AMERICA	8,128.59
0393	HOWARD ANTHON	8,115.12
A601	PLG, INC.	8,112.00
C576	DIVERSIFIED A	8,065.06
6160	NADINE CORP.	8,022.40
G706	L.G.K. ASSOCI	7,956.00
6672	PRIMAVERA SYS	7,950.00
1925	CONCO SYSTEMS	7,810.04
5168	LIQUIX OIL CO	7,803.00
9219	UNIVERSITY OF	7,787.18
7137	PLANTSCAPE IN	7,784.64
Z956	PUCKORIOUS AS	7,713.67
D883	AIR RECON	7,711.20
7773	SAFETY KLEEN	7,687.57
0825	DANIEL BERG	7,663.14
[illegible]345	LEXIS-NEXIS	7,564.90
[illegible]38	COMPUTER POWE	7,521.00
[illegible]86	OPERATION BET	7,500.00
7182	PORTERSVILLE	7,459.21
0109	ALIQUIPPA ALL	7,444.70
C555	CTS POWER SER	7,394.85
Z828	SMITH & HARRO	7,379.75
6271	NAACP	7,350.00
[illegible]212	PRESRAY	7,210.47
[illegible]731	CHEMICAL BANK	7,196.86
G460	JOHN HAUGHEY	7,191.00
D345	ESA	7,140.00
0995	R. F. BALCERE	7,131.71
4051	HIGHWAY EQUIP	7,110.07
4483	GRUNAU FIRE P	7,035.95
G820	AUXIER & ASSO	7,022.55
7484	ROAD DUST RED	6,975.80

Item No: C-3
Witness:
Page 11 of 28

VENDOR		SUM SUM JE AMOUNT
A689	ENVIRONMENTAL	6,975.42
A302	WHITMIRE, VER	6,959.30
7175	PORTER CONSUL	6,942.01
F620	TRESBRI DEVEL	6,936.00
C894	AERIAL DESIGN	6,929.42
Z178	SPECTRUM TECH	6,782.00
8751	TEKTRONIX, IN	6,749.50
G603	COMBUSTION RE	6,732.00
2116	COMPREHENSIVE	6,729.33
7604	ROSE,SCHMIDT,	6,714.48
D712	NOVATECH CORP	6,706.21
6518	OPEX CORP.	6,652.27
G408	MARTS BROTHER	6,649.12
5846	APTECH ENGINE	6,630.00
9502	VELAN VALVE C	6,515.30
4045	HEWLETT-PACKA	6,489.51
5382	MID-WEST PRES	6,489.36
Z485	ADVANCED ENVI	6,405.66
1948	HOMESTEAD VAR	6,399.00
F144	JV COMMUNICAT	6,397.19
4854	KNEPPER PRESS	6,382.04
0423	ARCO ENTERPRI	6,372.96
2484	PROVAC SERVIC	6,330.00
5559	MANUFACTURERS	6,328.73
9833	WITT-GATEWAY,	6,291.53
1948	BLOOMFIELD DR	6,242.00
4943	JSL ASSOCIATE	6,195.06
B046	GREATER PITTS	6,139.00
2210	CRONMILLER-MC	6,121.39
F015	ABF FREIGHT S	6,097.85
D498	BIZET & COMPA	6,035.00
D625	WOLFENDALE, I	6,006.01
7059	PITTSBURGH DA	6,000.00
1686	GREATER PITTS	5,950.00
8916	TOTAL EQUIPME	5,813.81
1260	BANK OF BOSTO	5,778.54
F686	CRAWFORD & CO	5,763.00
F768	BUSINESS RECO	5,754.03
0169	ALLEGHENY BOI	5,722.20
3128	DIETZCO INDUS	5,707.92
G468	ALLEGHENY BEL	5,680.85
8428	PAUL, HASTING	5,675.00
7472	NWT CORP.	5,668.00
6936	PINCH/HITTERS	5,629.08
D976	BASE INTERNAT	5,620.95
6245	NATIONAL DRAE	5,614.98
B492	KAY, CASTO, C	5,613.22
F010	SEKO AIR FREI	5,575.95
7963	REID AND PRIE	5,575.12
5886	LEXIS-NEXIS	5,574.70
7218	CONSORT TECHN	5,541.43
5372	MQS INSPECTIO	5,513.29

Item No: C-3
Witness:
Page 12 of 28

VENDOR		SUM JE	SUM AMOUNT
9777	UTILITIES TEL		5,513.00
A380	HUNTON & WILL		5,372.49
[illegible]503	IRD MECHANALY		5,348.55
A195	THOMAS EDMIST		5,313.45
G362	POWERSCAN		5,304.00
4383	INFORMATION H		5,303.60
7506	RENTOKIL, INC		5,252.30
F323	PORT VUE PLUM		5,249.96
D382	CYBERNETICS S		5,245.57
0925	BALLARD, SPAH		5,204.24
B389	VESTEK		5,175.00
F793	OXFORD CONSTR		5,130.53
7944	SERVI-SEL, IN		5,127.54
1948	SWISSVALE CON		5,116.05
G459	JODAN TECHNOL		5,098.88
3435	ECKERT SEAMAN		5,063.60
G377	AMERICAN ARBI		5,051.55
1686	AMERICAN ASSO		55,000.00
Z931	STOWE ENGINEE		4,977.59
D586	CORPORATE COM		4,976.56
6939	JAMES R. PITC		4,960.67
1686	AUDUBON SOCIE		4,950.00
5393	MAILING SERVI		4,917.94
5560	MATCO		4,896.00
F905	CAROL SIEGEL		4,872.40
G305	COVEY LEADERS		4,869.64
3982	HELMICK CORP.		4,849.08
7001	PITTSBURGH DE		4,841.78
4387	IBM CORPORATI		4,700.04
2180	CRAMER & LIND		4,674.43
5918	MITCHELL PLUM		4,656.99
5969	RAN PITTSBURG		4,625.61
8595	TRENTEC		4,608.89
B386	HAY GROUP, IN		4,550.75
Z218	INSIGHT SERVI		4,531.22
Z254	HUGHES TYPEWR		4,517.14
B009	ENCOTECH		4,488.00
F516	MARY BRIGNANO		4,478.21
0361	AMERIGAS		4,432.63
C204	WEBB, BURDEN,		4,432.15
2498	DOBLE ENGINEE		4,386.18
0178	ALLEN-SHERMAN		4,358.90
1686	MARGARET MILL		4,357.00
5103	LESKO RESEARC		4,338.20
1948	FIRST FEDERAL		4,301.80
1686	THE KINGSLEY		4,300.00
2215	CROSBY VALVE		4,284.60
D442	PONY EXPRESS		4,284.50
9020	TRI-STATE BEL		4,251.00
D227	ROSS INCINERA		4,185.70
F528	TURBINE CONTR		4,150.00
G859	CONTROL RISKS		4,132.87

VENDOR	SUM JE	SUM AMOUNT
G090 LAB SUPPORT		4,064.01
1686 VANN ELEMENTA		4,035.00
C895 KEDDAL AERIAL		4,030.50
Z843 AXIOM INTERNA		4,028.00
G782 DIRECT REPORT		4,027.88
Z840 GRELLA CONSUL		8,000.00
4532 JOHNSON CONTR		3,976.00
3840 J. W. HARLEY		3,970.76
C009 STANLEY STEEM		3,967.58
B717 LANDMARK SECU		3,964.20
9923 XEROX CORPORA		3,950.00
C224 RENAISSANCE P		3,940.00
Q194 DELAWARE INVE		3,937.00
1686 ALIQUIPPA SCH		3,925.00
9360 UNISON TRANSF		3,905.29
7122 PENNSYLVANIA		3,896.42
8300 SOUTHWEST RES		3,889.14
1685 CARSON PUBLIS		3,870.00
1948 BELL FEDERAL		3,861.96
8296 SOUTHWEST MIC		3,835.41
0311 AMERICAN RED		3,829.00
G835 THE SCHMITT G		3,812.50
4807 KINTON CARBID		3,809.70
C119 AUDIOMETRIC B		3,796.24
7724 RUTHRAUFF INC		3,765.62
Z676 GERHARDT'S, I		3,753.50
G523 WATSON & RENN		3,747.95
B843 TR*STAR		3,745.00
3310 ELECTRONIC RE		3,715.13
4641 R.C. KAISER P		3,697.81
C022 CORE BUSINESS		3,685.29
7249 DEAN WITTER R		3,673.82
A952 ENERTECH		3,625.23
F207 MARLIN INDUST		3,620.57
1469 BUFFALO SCALE		3,584.50
3112 E P R I		3,580.00
1685 SALTWORKS THE		3,500.00
G772 NPD COMPUTER		3,488.00
F692 O'TOOLE COMMU		3,478.71
G034 THE WORKPLACE		3,468.00
G739 WALTER ROBBIN		3,442.50
7148 POLAR WATER C		3,398.78
4809 HOUSING OPPOR		3,346.30
1686 BEAVER AREA S		3,294.00
4040 HAPCHUK SANIT		3,284.40
A491 SPECIALTY COA		3,247.87
1686 THE INTERSECT		3,240.00
5943 MINE SAFETY A		3,237.94
C422 GATEWAY EXTER		3,213.32
1637 COMPUTER/COMM		3,210.00
9617 NATION SAFETY		3,135.00
2941 EXECUTIVE REP		3,100.00

Item No: C-3
Witness:
Page 14 of 28

VENDOR	SUM JE	SUM AMOUNT
Z276 CUMMINS DIESE		3,055.06
2103 CARLOW COLLEG		3,050.00
1948 ALLEGHENY VAL		3,043.00
D598 TOPS TEMPORAR		3,016.49
B790 IMAGESCAN, IN		3,007.90
7249 PAINEWEBBER I		3,006.35
F619 INNERFACE ARC		3,003.22
F413 CHICAGO STOCK		9,000.00
8421 TSI, INC.		2,971.28
G399 TAPETEL ELECT		2,969.16
1686 CLAIRTON SCHO		2,968.00
A635 CAMTECH, INC.		2,962.69
7176 POINT PARK CO		2,843.76
G555 CCB SERVICES		2,835.30
4132 HOLIDAY INNS		2,825.75
0941 BIACH INDUSTR		2,825.00
G847 FACILITY ISSU		2,782.00
5730 CUSTOM VALVE		2,776.11
7656 PUBLIC UTILIT		2,758.16
B551 PETROCLEAN		2,733.67
F200 VINTAGE		2,725.00
1948 OAKMONT REALT		2,712.80
8028 DIRECT REPORT		2,704.89
?318 DAVIS-FETCH C		2,681.40
1969 TRISACH		2,661.95
2913 DEMANDING TEC		2,658.00
G419 RESPONSE RENT		2,655.44
2991 ENERGY SYSTEM		2,652.00
A967 SOLIDSTATE CO		2,632.87
G656 INTERNATIONAL		2,623.40
9909 BUSINESS VERI		2,566.32
772 FANTAZIER CRE		2,557.73
298 MATRIX COMMUN		2,550.00
2214 CSISZAR SERVI		2,533.53
2504 JAMES G. HUHA		2,525.00
7249 PRUDENTIAL SE		2,512.78
Z782 ALUMINUM COMP		7,500.00
D443 ALCO MANAGEME		2,482.79
F688 KBR, INC.		2,480.89
B801 PRIORITY SYST		2,465.00
A974 INVENTRON, IN		2,459.45
G253 OXSANA BYCZKA		2,448.00
2213 D & M, INC.		2,434.86
5969 H.E. GARDNER		2,424.72
6515 HUGHES SUPPLY		2,423.16
F856 WELLNET		2,422.01
C592 HOWREY & SIMO		2,421.58
3650 ELECTRONIC TE		2,418.62
F486 LATIMORE TRUC		2,399.59
D792 EMERALD PRODU		2,392.15
G780 FIRST TRUST O		2,360.96
3235 ENTECH ENGINE		2,349.33

Item No: C-3
Witness:
Page 15 of 28

VENDOR		SUM SUM JE AMOUNT
3002	FRANKLIN FIEL	2,347.02
C898	SYSTRAN CORP.	2,337.97
G526	PITTSBURGH EN	2,320.00
G361	COGNOS CORPOR	2,310.00
Z360	HELTZEL ART D	2,309.31
G027	HANCO, INC.	2,295.00
F244	EPH MATERIAL	2,288.94
B589	ARATEX SERVIC	2,288.36
4835	CLAYTON ENGIN	2,270.01
Z664	PECO ENERGY C	2,219.17
Z819	ATI-ORION	2,217.22
G438	VANDINE GROUP	2,211.20
9831	VERNON DELL T	2,191.84
5969	EAST COAST IN	2,190.00
Z472	PM ASSOCIATES	2,172.00
G540	METRO COPY &	2,156.40
1902	COCHRANE SUPP	2,135.88
5206	MINUTEMAN PRE	2,118.06
4112	HOECHSTETTER	2,109.69
1936	R.T.P.	2,103.55
G277	SACHNOFF & WE	2,093.22
5945	GREATER PITTS	2,083.20
7009	NEW PITTSBURG	2,046.60
1948	HOFFMAN'S DRU	2,021.40
D892	PENN WINDOW C	2,016.95
A163	R. E. MCGUIRE	2,011.60
1685	JANET RINMEL	16,000.00
0985	ANTECH LTD.	1,995.00
A467	COASTAL DISPL	1,992.20
B096	SOUTHWESTERN	1,989.00
9974	YORK INTERNAT	1,988.00
2248	DRV, INC.	1,958.36
Z948	MARTONE ENGIN	1,950.00
5617	QUINTAIN RESO	1,947.12
0697	THE ATLANTIC	1,944.12
9419	WHITE & CASE	1,890.62
Z536	IBEX ENGINEER	1,887.67
[illegible]792	LAWN PRO	1,876.98
[illegible]077	AMERICAN ASSO	1,869.93
G265	A-1 BABBITT C	3,672.00
G255	RONALD G. MAL	1,827.00
4326	PRIME TECHNOL	1,801.75
6866	PHARES ENTERP	1,785.37
B032	TRANS UNION C	1,757.99
F125	THE FINAL TOU	1,732.07
B525	FREEZE SERVIC	1,715.82
G159	CENTER FOR HA	1,708.50
7780	SAFETY FIRST	1,707.29
3291	EASTERN TECHN	1,700.00
9639	UNISYS CORPOR	1,689.20
8026	FORENSIC TECH	1,688.28
C181	ARCADIA CONTR	1,667.70

Item No: C-3
Witness:
Page 16 of 28

VENDOR		SUM SUM JE AMOUNT
D293	DOBLE ENGINEE	1,635.00
D988	GENERATOR & M	1,632.00
D971	RGM & ASSOCIA	1,631.82
G431	USCONNECT PIT	1,626.40
1948	MURPHY INSURA	1,623.00
5969	ANTHONY V. CO	1,600.00
6916	PHOTO TYPOGRA	1,584.66
2812	RIC EVANS, PH	1,557.88
D584	VINCE GAGETTA	1,550.40
F792	NIGHTRIDER	1,550.19
6002	RAUB SUPPLY C	1,530.00
0077	AIRSERCO MFG.	1,518.00
B494	ANDREW KALOTA	7,500.00
Z290	JESCO AMERICA	1,477.00
8390	THE STAHURA C	1,471.50
F022	EMERY WORLDWI	1,470.70
0512	AUMA ACTUATOR	1,468.26
0375	BEACON HILL P	1,458.90
A112	BLACK & VEATC	1,455.52
6106	MOSLER, INC.	1,454.02
3602	MELANIE KALUP	1,450.00
0839	AMCOM OFFICE	1,449.91
2642	CORPORATE MAN	1,445.84
A316	DRAKE ADVERTI	1,441.21
D130	AU BON PAIN,	1,434.99
6471	NUCON INTERNA	1,424.54
5969	BENTZEL & ASS	1,395.00
1685	GRAND HYATT W	1,392.55
1602	J. E. LISOWSK	1,380.00
6541	C4 IMAGING	1,378.00
1948	LINDA G. PFIR	1,372.20
G542	REGSCAN, INC	1,365.86
0378	ANACOMP INC.	1,353.76
C347	R. L. HOLIDAY	1,352.43
3613	GRAVER WATER	1,350.11
3140	CHUJKO BROS I	1,348.20
6552	ORKIN EXTERMI	1,347.14
D104	BEAVER COUNTY	1,346.40
C480	DICKIE, MCCAM	1,344.07
7237	PRO-AM SAFETY	1,334.36
G355	KTA/SET INTER	1,326.00
F792	NIGHTRIDER, I	1,321.49
8212	SONITROL SECU	2,616.00
D476	SUBSURFACE TE	1,300.00
B046	SCOUTING FOR	1,290.00
G421	SIGCO	1,280.00
Z599	NUCLEAR STAND	1,278.36
G804	PEPPER HAMILT	1,257.00
1948	SPRING HILL S	1,252.95
G168	MURRAY A. FEL	1,252.18
1686	NATIONAL ASSO	5,000.00
1685	AXIOM REAL ES	1,228.40

VENDOR	SUM JE AMOUNT
2084 CONVERSION SY	1,224.00
1060 GRAVER TANK A	1,223.57
3687 HARRY GUCKERT	1,218.67
D121 ELLIOTT NEWMA	1,200.00
G799 PRINT MANAGEM	1,191.98
6225 NATIONAL INST	1,188.10
4590 JUDGE STUDIO	1,186.23
F654 BRAMBLES EQUI	1,171.26
Z696 CAYS SOFTWARE	1,170.24
Z861 ACUTRAN	1,170.00
F309 RECORDS IMPRO	1,169.85
1948 REEVES BANK	1,157.64
6660 PACKARD INSTR	1,157.25
2721 EBERLINE INST	1,148.47
F855 JEFFERSON HEA	1,132.20
5969 INTERSTATE OF	1,119.00
8986 TRI-STATE BEL	1,111.80
9245 GIANT EAGLE	1,100.00
5969 DONALD S. MCP	1,099.40
A910 MARRIOTT MANA	1,090.75
F857 ALLEGHENY GEN	1,090.38
D948 ON TARGET MAP	1,090.00
F623 JNM ASSOCIATE	1,086.30
D449 FINN INC.	1,084.55
1411 THE BUREAU OF	1,075.35
4448 JACKSON WELDI	1,061.22
G654 DESANTIS PLUM	1,059.78
B800 NORTHEAST TEC	1,058.34
Q428 RAMSAY CORPOR	1,038.87
3137 FISHER SCIENT	1,036.36
1686 OASIS	1,035.00
5969 AUXIER AND AS	1,026.44
D033 PROFESSIONAL	4,080.00
1263 BAER & WEIS C	1,014.89
1562 PATRICK J. BA	12,000.00
9617 WESTERN PENNS	998.50
5969 LORI L. GALLA	996.25
1948 PEOPLES BANKO	993.60
3611 GRAULE STUDIO	973.14
8429 STANDARD REGI	970.00
1833 TREASURER, CI	958.00
3480 GEYER PRINTIN	957.65
G646 CHASEMELLON S	957.11
6781 OCE'-BRUNING	956.53
5969 FIRST TRUST O	952.75
C166 AIRPORT MRI A	950.00
F784 CAD ONE, INC.	941.13
2402 DEAR JOHN TOI	902.52
1686 TALK MAGAZINE	900.00
G730 PA. TANK & TU	885.43
A020 ALNOR INSTRUM	881.83
F753 PHOTO SCIENCE	872.00

Item No: C-3
Witness:
Page 18 of 28

VENDOR		SUM SUM JE AMOUNT
5969	DR. JANE LECL	853.82
D130	AU BON PAIN C	847.47
F760	TESONE TRANSP	840.08
5247	THE MAGIC LAN	829.25
2442	DICTAPHONE CO	826.04
4990	TECH/OPS LAND	825.50
8930	THORP, REED &	824.46
2968	FAIRBANKS SCA	824.04
4929	KRUMAN EQUIPM	823.43
Z514	COMPREHENSIVE	812.00
8149	STAVELEY INST	808.93
0000	HOGEL, MAUREE	807.05
[illegible]2	MEDICAL REHAB	806.70
[illegible]936	COMPUTER PROD	803.32
3414	GATEWAY PUBLI	802.06
A144	ELRAMA VFD EM	797.50
5403	MAIL-WELL ENV	795.19
F115	WEIS & WEIS	771.63
G409	ROBERT A. GOD	1,530.00
[illegible]948	IRWIN BANK &	754.00
[illegible]18	WILLIAM MCLAC	3,000.00
1685	DAVID GATES	749.00
G585	CLAYPOOL CRAN	734.40
0000	SKONCEY, MICH	733.71
1442	CITIBANK, N.A	729.00
5969	MAUREEN L. HO	723.04
5969	COMPUCHEM LAB	722.45
4049	HEYL & PATTER	719.40
B269	IGLOO CLUB	716.75
9061	TRI-STATE VID	706.49
A723	DC SYSTEMS, I	704.16
1686	BRADDOCK ENHA	1,400.00
1948	MURPHY AGENCY	697.80
5795	MELLON SECURI	693.06
5969	PEGASUS	689.74
6676	P A C T	686.13
6246	PANAMETRICS,	683.63
4747	WALTER H. KES	682.38
B105	JOHN J. CLARK	654.00
5969	TOPHEALTH	639.33
1103	ANCOM OFFICE	637.12
Z825	VIRGINIA POWE	629.79
1948	COMPASS FEDER	628.18
[illegible]504	UNIVERSITY DE	1,250.00
[illegible]440	THOMPSON GEAR	624.24
[illegible]229	BREATHING AIR	624.00
[illegible]340	LYNX INC.	614.59
[illegible]773	ENDRESS & HAU	613.90
[illegible]847	SIR SPEEDY	609.06
[illegible]509	PACIFIC HYDRA	608.35
[illegible]183	BRADLEY BROWN	601.65
9511	DIGITAL CONTR	598.74

Item No: C-3
Witness:
Page 19 of 28

VENDOR		SUM JE	SUM AMOUNT
2452	DIGITAL EQUIP		596.88
0159	AIR MONITOR C		595.89
F195	TBB		595.63
A490	AT&T WIRELESS		593.66
3085	UNIVERSAL WEA		593.60
G478	ALLEG RECORDS		587.96
5969	INTERNET SERV		580.96
5969	FINANCIAL WOR		575.00
1685	TOM PURCELL (		560.00
2504	KEYSTONE REHA		558.00
F026	PITTSBURGH-FA		557.24
8133	SERVICEMASTER		556.40
1948	SWISSVAE CONV		555.15
G742	CRESTWOOD REA		1,100.00
F655	EVANS MACHINE		545.00
F691	DESIGN 3 ARCT		537.96
9543	FT. DUQUESNE		536.70
1553	CAPRI GLASS		532.00
1685	ROSENBAUMS DE		529.73
5969	MOTIVATIONAL		526.50
9343	VOCATIONAL RE		523.61
1643	J. V. MCGEE O		519.18
C982	DUQUESNE LIGH		511.71
5362	BNY INFORMATI		511.56
G490	IONEX WATER T		510.00
2504	ELRAMA VFD EM		504.10
5937	MILTON ROY CO		500.32
B163	AMERICAN HEAR		5,500.00
5676	LAIDLAW TRANS		496.00
6578	THE OVERHEAD		492.74
F300	BIDWELL FOOD		491.53
5969	ROLLING IN TH		490.33
0000	BAKER, ANDREW		482.54
5969	MERCOMM INC./		480.00
3112	ELECTRIC POWE		476.48
Z287	PITTSBURGH EM		475.94
3584	EXPRESS PRINT		474.01
8234	ROCKWELL'S RE		466.50
8873	TOP NOTCH ART		456.20
5969	PEPPER HAMILT		456.00
5969	STUART HAGGER		450.15
B508	PLEIER & ASSO		900.00
Z842	HEWETT-PACKAR		447.79
1726	CHAMP PRINTIN		446.00
2666	DUST CONTROL		442.57
6779	PAPPAS REPORT		440.10
2503	F. W. DODGE		438.16
4113	CRITTER CONTR		436.95
1685	MILDRED E. ST		436.00
2752	CUMMINS-ALLIS		435.81
5703	JIM JUDKIS		433.35
6764	PENNSYLVANIA		430.11

Item No: C-3
Witness:
Page 20 of 28

VENDOR		SUM JE	SUM AMOUNT
1853	CITY OF PGH.,		426.00
1948	W. J. KELLAR		425.25
8711	TEXAS NUCLEAR		424.00
5969	FRACIS SEON (		420.00
3696	GATEWAY CLIPP		417.60
1459	CMR/HAY REPOR		417.30
F863	PITTSBURGH TE		415.97
1948	HOFFMANS DRUG		414.00
G358	CCH, INC.		413.57
6781	OCE'-BRUNING,		411.62
1211	BAKEWELL CORP		410.75
5969	SQUARE BLOCK		410.00
D691	PG PUBLISHING		409.40
0346	AT&T 800 READ		407.61
A961	SOS TAXI		405.10
8426	CUSIP BUREAU		401.25
2504	IRVIN M. GOLD		800.00
0000	THOMAS, DAVID		395.69
5969	UCI BETTER CO		395.00
F474	SKILLPATH, IN		393.00
4440	INNER-TITE CO		391.91
3298	THE FREE PRES		391.50
D394	PAPERDIRECT,		386.53
Z675	SLADE, INC.		385.00
1948	A.P. DEJULIUS		381.30
1231	ANALYTICAL IN		379.28
2504	WESTERN PA. R		375.00
B222	COMDISCO, INC		374.50
1948	BELL FEDERAK		364.80
2871	DATAPLEX INFO		362.66
8017	SHANNON SAFET		362.50
5969	RONALD G MALE		358.00
C605	SCHENECTADY M		353.00
0434	AQUA FILTER F		352.34
5969	ALLEGHENY COU	2,100.00	
F858	VALLEY INTERN		348.84
G426	LORI L. GALLA		346.30
3905	F. L. HAUS CO		342.94
0000	KERMAN, NORMA		335.18
0000	SARVER, N. RI		334.01
[illegible]59	INACOM INFORM		327.00
[illegible]46	DIEBOLD, INC.		326.40
5074	THE DEPOSITOR		320.00
1833	CITY OF PGH.		316.00
F325	BUSINESS & LE		315.65
7075	PITTSBURGH PO		313.20
1948	BELL FEDERAL-		303.60
[illegible]586	EXPANDING YOU	1,200.00	
[illegible]474	CONFERENCE CA		298.53
4309	GENE HUNT		296.90
F664	ALLEGHENY PAP		294.26
5969	ENVIROSCIENCE		290.00

Item No: C-3
Witness:
Page 21 of 28

VENDOR		SUM JE	SUM AMOUNT
F482	JOHN C, DRAPE		285.60
1948	NATIONAL STEE		284.85
Z960	AMERICAN LEAK		283.55
2692	EA ENGINEERIN		281.43
1686	URBAN YOUTH A		280.00
Z564	SMITHKLEIN BE		277.50
B929	TUMA LAWN SER		275.40
5969	SUBSTANCE ABU		275.00
1833	CITY OF PGH.T		274.00
0000	AMON, VINCENT		273.88
6747	MONTOUR HEIGH		272.56
1948	W.J. KELLAR A		272.40
0860	ATLAS COPCO		270.30
3826	CLYDE HARE, P		535.00
9579	WEST PENN LAC		266.83
5969	DORSEY & WHIT		264.90
4904	INDUSTRIAL HE		258.06
1833	BUREAU OF BUI		258.00
F166	LOCKS UNLIMIT		256.01
F199	YWCA OF GREAT		1,750.00
G786	NATIONAL CARE		248.00
5969	PRINCE PRINTI		245.92
7574	RICE ASSOCIAT		235.62
1948	W J KELLAR AG		229.95
G046	KRALIK LANDSC		229.50
0000	LACHIMIA, RIC		226.89
F627	SMITHFIELD CA		226.80
5969	MT. LEBANON,		225.68
1685	J.R. O'DWYER		675.00
Z411	OMNI HEALTH C		220.00
Z580	HOWARD E. STU		219.30
2105	PRINT TECH OF		214.96
4300	IABC DISTRICT		420.00
1330	OCE-BRUNING		207.10
1833	BUREAU OF BLD		206.00
0000	BOEH, PAUL A.		204.60
0000	CASASANTA, PA		202.65
1685	EHS MONITORIN		1,000.00
7252	FRED PRYOR SE		198.00
3534	GATEWAY OFFIC		196.88
5792	METRO CATERIN		196.31
5969	NORTH AMERICA		196.00
5969	ALLEGHENY WOR		192.00
4132	HOLIDAY INN--		190.80
0732	BEAVER COUNTY		190.00
0777	ASPEN PUBLISH		184.58
1948	IRWIN BANK AN		183.80
1686	MERRICK ART G		180.00
3478	GENICOM CORP.		175.57
B094	MACMILLAN COM		172.14
0000	PACK, WILLIAM		170.19
B997	B & P LOCKSMI		169.88

Item No: C-3
Witness:
Page 22 of 28

VENDOR	SUM JE AMOUNT
5969 THE HEALTH SO	168.43
4300 IABC	167.06
1686 WOMEN'S ACHIE	166.68
Z589 COMPUTER SALE	162.18
7889 SCOTT ELECTRI	162.00
7969 B & D OFFICE	160.50
2504 PETER N. CHRI	160.00
1685 JIMMY'S DOWNT	159.59
1685 NORTH HILLS N	157.00
6271 NATIONAL ASSO	155.00
7249 BROWN BROTHER	152.81
0000 SKIBA, MICHAE	151.55
1685 ACCESS TELECO	151.36
5969 DELAWARE SECR	300.00
5969 RAGAN COMMUNI	147.34
1286 W. E. BROSIUS	146.88
5969 NATIONAL CARE	139.00
G357 BAKER & BOTTS	138.50
1948 BELL FEDERAL	135.96
5969 GUZYK SUPPLY	135.15
0000 LANE, KEVIN A	135.08
5969 THE CITY DELI	134.88
3659 FRANKLIN INTE	133.75
1948 ANTHONY P. DE	132.30
9583 WEST PENN LAC	132.06
F054 ROADWAY EXPRE	131.52
2504 EMERGENCY PHY	130.00
F869 UNSMOKE SERVI	128.40
5969 EXECUTIVE DEV	128.23
5969 THE MAILER'S	126.26
9051 HENRY TROEMNE	125.98
C101 PITTSBURGH BU	124.00
157 ACTION TRANSI	120.00
685 USA TODAY	119.00
8794 TYLER MOUNTAI	118.98
5430 GENERAL BINDI	118.77
5969 SEMINARS INTE	118.00
1685 COMPETITIVE H	117.70
1948 W.J.KELLAR AG	115.50
0000 MULLEN, DAVID	114.65
1011 FINDLAY TWP.	114.16
F046 PJAX	111.37
5969 SHHS JEFFERSO	110.77
1391 CHOICE SERVIC	109.41
9606 WEST PENN DAT	109.26
8028 BROWN BROTHER	109.12
G716 TERMINIX	109.00
5737 HACH CO.	105.73
1011 ALLEGHENY VAL	105.00
9130 NATIONAL CITY	101.86
6218 AL HALLEY'S V	101.59
1685 BLACK LAW STU	600.00

VENDOR	JE	SUM SUM AMOUNT
2608 DUNN AND BRAD		99.00
F664 ALLEGHENY WAG		196.20
5220 LOFSTROM ELEC		96.50
5969 ALLEGHENY REC		95.72
1466 BURRELL RENTA		94.55
1205 BRICKER'S INC		93.67
5969 AUXIER & ASSO		92.50
Y004 MED SAFE		180.00
B607 GUZYK SUPPLY		89.50
6943 PITNEY-BOWES,		89.38
5969 JIMMY'S DOWNT		88.80
1948 BOROUGH OF GL		87.00
D191 SMITHKLINE BE		86.00
D383 TCS MANAGEMEN		85.00
5969 MIKE'S PROFES		84.80
3530 GOLDHABER, RO		84.70
2504 SPORTS MEDICI		82.50
D657 EQUIFAX CREDI		82.35
5969 CENTER FOR EM		160.00
1948 BORO. OF GLAS		79.80
5969 QUADRANGLE RE		79.50
2633 CAREER TRACK		158.00
6581 PIP PRINTING		78.67
6812 PENSTAN SUPPL		78.48
1948 BORO OF GLASS		75.15
1686 CENTRAL PENNS		150.00
2551 CEISLER/RICHM		73.67
8189 SIMMONS BUSIN		69.55
B366 ALLEGHENY LIM		69.00
1685 JIMMY'S DOWN		68.60
1948 A. P. DEJULIU		68.55
5969 DREYFUSS HUNT		66.78
1948 COMPASS FEDE		64.68
B941 THREE RIVERS		64.20
4698 IMAGE POINT P		61.04
6505 OHIO EDISON		60.55
1948 SPRING HILL		59.70
F049 PRESTON TRUCK		59.30
5969 DISTRICT COUR		59.00
5969 BSC LITHO		57.80
5616 MONARCH CHEMI		56.10
2504 METROPOLITAN		55.00
F912 J.D. HARVEY		54.50
1685 EXTRA EXTRA N		54.15
D158 GRASEBY/STI		54.00
1685 THE CITY DEIL		50.93
5969 LONE STAR STE		150.00
5969 ADVERTISING U		46.45
9007 TRIANGLE MESS		46.00
1685 THE CITY DELI		43.98
5969 FRANKLIN QUES		43.81
4650 EASTERN OFFIC		42.80

Item No: C-3
Witness:
Page 24 of 28

VENDOR	SUM SUM JE AMOUNT
F047 PITT OHIO EXP	42.27
1760 THE CHASE MAN	41.04
7009 PITTSBURGH CO	80.00
6386 NATIONAL INFO	37.34
5969 MARTIN E. GOL	32.10
5969 ACHMM	60.00
0207 IKON OFFICE S	25.50
1685 CITY DELI & C	24.57
5969 CITY DELI & C	23.10
1685 THE PITTSBURG	23.00
2871 DATAPLEX CORP	21.40
2232 RSD	21.20
5969 COUNCIL FOR A	40.00
7249 ICE SYSTEMS,	18.56
0632 AMERICAN SOCI	17.76
5969 YORK COUNTY I	17.58
5969 JEFFERSON MED	17.00
5969 ADADC MID EAS	16.21
7249 KEYSTONE FINA	12.95
1011 FINDLEY TWP.	12.50
7249 FIDUCIARY TRU	11.50
0000 LUCCI, GERALD	11.20
3024 JOHN M. MALON	11.00
1686 RENEGADES SOF	10.00
4763 KEYSTONE PICT	9.00
7249 GREEN LINE IN	7.95
0000 NITOWSKI, MAR	7.86
F020 COURIER EXPRE	2.85
2595 DUFF & PHELPS	-10,000.00
	100,575,213.62

Last Page of Schedule A

Item No: C-3
Witness:
Page 25 of 28

Schedule B

VENDOR	DESCRIPTION OF SERVICES PROVIDED
Bechtel Corp.	Construction Services
Westinghouse Electric Corp.	Electric Generation Services Support
Lewis Tree Service	Tree Trimming Services
Burns International	Nuclear Security Services
The Babcock & Wilcox	Waste Disposal Services
Bartlett Nuclear	Nuclear Training Personnel Services
Scientific Ecology Group	Low-Level Radioactive Waste Disposal Services
Trumbull Corporation	Construction Services
Foster Wheeler Zack, Inc.	Construction Services
Leboeuf, Lamb, Lieby & McRae	Legal Services
Payco American Corp.	Collection Services and Credit Investigations
GD Barri & Associates	Support Services for Nuclear Procurement
Dymun-Nelson	Personnel Evaluation Services
Tad Energy Services	Employment Service-Quality Control Personnel
Fern Valley Industries	Waste Disposal Services
Stone & Webster Engineering Corp.	Engineering Consultation Services
Ross & Hardies	Legal Services
Halliburton Nus Environmental Corp.	Data Storage Services
Skadden, Arps, Slate, Meager & Flom	Legal Services
Kirkpatrick & Lockhart	Legal Services
Cauley Detective Agency	Security Services
Alexsis, Inc.	Third Party Claims Administrator Services
Conservation Consultants, Inc.	Liurp/Smart Comfort Program Support Services
Trace Services, Inc.	Field Collection Work Support Services
Chem Nuclear Systems	Low-Level Radioactive Waste Disposal Services
Shaw, Pittman, Potts & Trowbridge	Legal Services
Cambridge Reports	Support Services for Corp. Perf. Analysis
National Inspection Consultants	Outage Contractor QC Inspection Services
A.C.R.T., Inc.	Tree Trimming Planning Services
Hydro Technical Services, Inc.	High Pressure Water Cleaning Services
QSC Painting	Painting Services
Interstate Nuclear	Nuclear Maintenance Services
C & K Industrial Services, Inc.	Vacuum Truck Services
ITT Movats, Inc.	Calibration & Repair Services-DL-BV Tools

IBM Corp.	Computer Consultation & Services
Todd & Silverberg PC	Legal Services
United Science, Inc.	Maint. Svcs-Continuous Emmissions Monitoring Equip
Horace Cofer	Training Services for Maintenance Training Program
Zetec, Inc.	Steam Current Eddy Analysis Services
Lantek Computer Service	Computer Repair & Services
Power Safety International	Technical Training Support Services
The St. George Group	Advertising Services
The Northbridge	Consulting Services
GPS Technologies, Inc.	OH and URD Transmission Training Services
Skutski & Associates	Legal Services
Master-Lee Energy Services Corp.	Consulting Services
PNR and Associates	Customer Survey Consultation Services
Kirkwood Consulting Associates, Inc.	Consulting Services
DePaul & Associates, Inc.	Help Desk System Support Services
Mellon Bank, N.A.	Financial Services
MPW Industrial Services, Inc.	Demineralized Water Service Provider
Sulzer Bingham	Plumbing Services
Davis Reilly	Collection Services
Heidrick and Struggles, Inc.	Personnel Search Services
Reed, Smith, Shaw & McClay	Legal Services
Itron, Inc.	Meter Reading Services
KCS Training & Temporary Services,	Employment Services-Temporary Personnel
PCX Consulting	Consulting Services
Deloitte & Touche	Financial Consulting Services
The Credit Bureau, Inc.	Collection Services and Credit Investigations
McKamish Chesapeake, Inc.	Support Services for HVAC and Plumbing Needs
Pittsburgh Mailing Systems	Mailing Services
Crane Co.	Valve Equipment Sales and Repair
Teledyne Isotopes Midwest Laborator	Chemical Sample Analysis Services
Wylie Laboratories	Outage Maintenance Services
Oxford Development Company	Rental of Office Space
Electro-Mec	Electric Motor Repair Service
Skutski & Associates	Legal Services
Weavertown Transport Leasing, Inc.	Transportation Services
Integrated Planning Systems, Inc.	Emergency Preparedness Readiness Services
Kirkpatrick & Lockhart	Legal Services
CDS Consulting	Consultation Services
Joseph B. Fay	Construction Services

Business Alternatives, Inc.	Maintenance Services for Copy Machines
Diamond State Recovery	Collection Services
Pickard, Lowe & Garr	Analysis Support Services
Crain Brothers, Inc.	River Dredging Service
Vance Wright	Annual Report Design Services
Virginia Corp. of Richmond	Inspection Services
Allegheny Business Machines, Inc.	Office Machine Repair & Supplies
Ingersoll-Rand	Generating Station Equipment Services
Jose & Wiedis	Legal Services
R.J. Brown Towing Company	Towing Services
Pier	Engineering & Technical Services
Hamon Power Services, Inc.	Detection & Repair of Feedwater Leaks
Colt Industries	Equipment, Maintenance, and Services
GD Barri & Associates	Support Services for Nuclear Procurement
Eichleay Engineers	Engineering Services
Arkwright Mutual Insurance Company	Insurance Consulting Services
Canberra Industries, Inc.	Hardware Maintenance Services
Advertisers Assoc., Inc.	Advertising Services
Xerox Corp.	Maintenance Services
Barakat & Chamberlin	Consulting Services
Liken Service, Inc.	Employment Services-Temporary Clerical Personnel
Mizrah Design	Corporate History Book Design Services
Alexander & Alexander	Insurance Consulting Services

NOTE: See Schedule A for dollar amounts.

DUQUESNE LIGHT COMPANY

C. - Summary of Filing

4. Explain how the company has treated reserve accruals and balances for ratemaking purposes and provide the requested level of any self-funded reserve accruals by type of item, e.g., injuries and damages. Provide the beginning and ending year 1996 jurisdictional reserve balances, and 1996 actual accruals and charges.

Response:

The company made no adjustments for ratemaking purposes.

See Schedule A attached.

Schedule A

Schedule of Reserves 1996

	Beginning Balance	Accruals	Charges	Ending Balance
Injuries and Damages:				
Pending Compensation Claims	($1,905,278)	($347,710)	$0	($2,252,988)
Compensation Claims Non-Current	(4,348,437)	(1,457,146)	0	(5,805,583)
Compensation Claims Non-Current Coal	(13,157,625)	0	1,954,854	(11,202,771)
Total Injuries and Damages	($19,411,340)	($1,804,856)	$1,954,854	($19,261,342)
Doubtful Accounts Receivable	(17,919,467)	(10,763,363)	10,389,225	(18,293,605)
Legal and Environmental Reserve	(1,831,737)	(2,600,000)	1,450,428	(2,981,309)
Fossil Station Outages	(16,296,000)	(6,962,000)	6,053,595	(17,204,405)
Other Post Retirement Employee Benefits	(12,328,390)	(6,423,436)	1,312,411	(17,439,415)
Decontamination and Decommissioning of DQE	(9,031,320)	0	929,109	(8,102,211)
Penson Trust Liabiity	(32,423,664)	(7,460,143)	0	(39,883,807)
Warwick Mine Closing	(14,105,425)	(5,002,160)	457,272	(18,650,313)
Oxford Sublease	(11,276,740)	(1,182,740)	1,512,351	(10,947,129)
Total	($134,624,083)	($42,198,698)	$24,059,245	($152,763,536)

DUQUESNE LIGHT COMPANY

C. - Summary of Filing

5. Submit a listing of the amortization claims included in the total operation and maintenance expenses of the base year. Include the following information:

(a) Total expense being amortized
(b) Length of amortization (months or years)
(c) Remaining unamortized balance
(d) Commission Docket where amortization initially was claimed or approved

Response:

See attached Schedule A listing the amortization claims included in the total operation and maintenance expenses for 1996.

Schedule A

Amortization Claims Included in Total Operation and Maintenance Expense for the Year 1996

Description	Total Expense in 1996	Total Expense Being Amortized	Length of Amortization	Unamortized Balance @ 12/31/96	Commission Docket
Perry Unit No. 2 Abandonment	$8,471,653	$155,693,680	10 years	$0	R-860378
Property Subject to Amortization:					
Software	4,971,338	24,856,688	5 years	5,027,846	
Beaver Valley Unit No. 2 Leasehold Improvements	632,493	18,658,537	29.5 years	13,834,991	
Training Costs - Perry Power Station	627,894	18,522,877	29.5 years	13,765,492	
Improvements - Corporate Headquarters	424,054	8,481,083	20 years	213,163	
2841 Beaver Avenue Offices	209,901	4,198,026	20 years	3,050,474	
2839 Beaver Avenue Offices	70,482	1,409,637	20 years	1,294,566	
2833 Beaver Avenue Offices	22,934	458,690	20 years	201,992	
2837 Beaver Avenue Offices	13,939	278,772	20 years	220,707	
Century III Mall Office	11,953	83,673	7 years	53,708	
2835 Beaver Avenue Offices	4,081	81,611	20 years	54,098	
Electric Plant - Deferred Rate Synchronization Costs (Note A)	$14,114,900	$51,149,000	10 years	$41,446,132	P-00951001 and A-110150F0011
Corporate Headquarters Sublease Improvements	$1,607,586	$12,702,893	Various	$9,779,484	
Depreciation Adjustment (Note B)	$171,466	$5,303,711	5 years	$0	FA90-17-000
Total	$31,354,674	$301,878,78		$88,942,653	

Footnotes to Schedule A

Note A In accordance with the company's "Mitigation Plan", the company has expensed $9 million related to the depreciation portion of the deferred rate synchronization costs associated with Beaver Valley Unit 2 and Perry Unit 1. The company's approved plan provides for the amortization of the remaining deferred rate synchronization costs over a 10-year period beginning November 1996.

Note B During the FERC audit covering the period January 1, 1985 through December 31, 1989, the auditors took exception to the company's treatment of a depreciation adjustment due to a PUC rate making decision.

DUQUESNE LIGHT COMPANY

C. - Summary of Filing

6. Provide the total amount of pension expense included in the base year and explain the basis for the claim, e.g., Statement of Financial Accounting Standards No. 87 or Employee Retirement Income Security Act.

Response:

The total amount of pension expense included in 1996 was $11,945,000. The basis for the claim is the Employee Retirement Income Security Act.

DUQUESNE LIGHT COMPANY

C. - Summary of Filing

7. Provide a copy of the company's most recent pension plan actuarial study.

Response:

Attached is a copy of the company's most recent pension plan actuarial study.

Item No.: C-7

Memorandum

To: Jim Fornof, Lora Dikun - Duquesne Light Company

From: Jean Roma - Kwasha Lipton

Date: February 17, 1997

Subject: 1996 SFAS 87 and SFAS 106 Year-End Disclosure Information

---

Attached are the following exhibits that set forth a summary of 1996 SFAS 87 and SFAS 106 year-end disclosure information.

- December 31, 1996 Disclosure Information for the Retirement Plan, Supplemental Plan and Non-Qualified Programs
- Determination of 1996 Net Periodic Pension Cost for the Retirement Plan, Supplemental Plan, and Non-Qualified Programs
- December 31, 1996 Disclosure Information under SFAS 106

These results are based on the following assumptions:

- All recommended assumption changes (i.e., mortality rates, merit salary increases, basis to project future pays, retirement rates, turnover rates)
- Full recognition of the past service update for the Retirement Plan effective October 1, 1996
- Actual asset experience for 1996
- 7.50% Discount rate
- 4.50% Salary scale (plus merit)
- 6.00% Ultimate health care cost trend rate

Please note that these results differ from the information sent on February 12 in that the accounting due to the early retirement window has <u>not</u> been reflected. It is our understanding that the election period for the early retirement window extended to January 15, 1997 and therefore, we expect to reflect the all costs associated with the window in 1997.

If you have any questions, or if we can be of any further assistance, please call.

JER/MJS/ab

Item No.: C-7

Duquesne Light Company

December 31, 1996 Disclosure Information

	Retirement Plan	Supplemental Plan	Non-Qualified Programs
1. (Obligations)			
a) (Vested benefits)	($375,685,794)	($ 37,252,250)	($ 170,584)
b) (Accumulated benefits)	($395,412,712)	($ 40,076,974)	($ 170,584)
c) (Projected benefits)	($435,833,126)	($ 60,716,729)	($ 548,698)
2. Plan Assets at fair value	$448,798,117	$ 77,073,147	$ 0
3. Funded Status: [(1c) + (2)]	$ 12,964,991	$ 16,356,418	($ 548,698)
4. Unrecognized net loss (gain)	($ 98,742,334)	($ 29,764,957)	$ 125,300
5. Unrecognized prior service cost	$ 59,365,695	($ 16,549,052)	$ 973,837
6. Unrecognized net obligation (asset)	$ 274,955	$ 13,339,190	$ 238,728
7. Prepaid / (Unfunded accrued) pension cost prior to adjustment for minimum liability	($ 26,136,693)	($ 16,618,401)	$ 789,167
8. Adjustment required to recognize minimum liability	$ 0	$ 0	($ 959,751)
9. Prepaid / (Unfunded accrued) pension cost	($ 26,136,693)	($ 16,618,401)	($ 170,584)

Disclosure Rates:

1. Projected benefit obligation weighted average discount rate	7.50%	7.50%	7.50%
2. Expected compensation increase (approximately)	5.25%	5.25%	5.25%

Item No.: C-7

Page 4 of 5

Duquesne Light Company

Determination of 1996 Net Periodic Pension Cost (NPPC)

	Retirement Plan	Supplemental Plan	Non-Qualified Programs
A. January 1, 1996 NPPC Determination:			
1. Service Cost (with interest to end of year)	$ 10,292,300	$ 1,863,176	$ 53,426
2. Interest Cost	$ 28,255,285	$ 4,309,304	$ 32,396
3. (Expected Return on assets)	($ 31,545,511)	($ 5,385,527)	$ 0
4. Amortization of unrecognized prior service cost	$ 3,899,142	($ 1,144,369)	$ 126,177
5. Amortization of accumulated losses (gains)	($ 286,022)	($ 967,327)	$ 13,933
6. Amortization of unrecognized net obligation (asset)	$ 31,971	$ 1,732,363	$ 47,745
7. FAS No. 88 settlement loss	$ 0	$ 0	$ 616,142
8. Net periodic pension cost	$ 10,647,165	$ 407,620	$ 889,819
B. December 31, 1996 NPPC Determination:			
1. Service Cost (with interest to end of year)	$ 10,292,300	$ 1,863,176	$ 53,426
2. Interest Cost	$ 28,255,285	$ 4,309,304	$ 32,396
3. (Actual Return on assets)	($ 49,710,309)	($ 8,463,021)	$ 0
4. Net amortization and deferral	$ 21,809,889	$ 2,698,161	$ 803,997
5. Net periodic pension cost	$ 10,647,165	$ 407,620	$ 889,819
C. Assumption information:			
1. Discount rate	7.00%	7.00%	7.00%
2. Compensation increase (approximately)	5.00%	5.00%	5.00%
3. Asset return	8.25%	8.25%	8.25%

Note: Item B Reflects the breakdown necessary for the 1996 Annual Report disclosure. In accordance with Paragraph 23 of FAS 87, the actual return on plan assets is based on the fair value as of the beginning and end of the year, adjusted for contributions and benefit payments.

Item No.: E-7

Duquesne Light Company
Management and Bargained Employees

December 31, 1996 Disclosure Information under SFAS No. 106

A. Reconciliation of funded status:

1. Accumulated postretirement benefit obligation (APBO):	
a. Retirees	($ 8,840,581)
b. Active plan participants fully eligible for retirement	($ 3,828,840)
c. Other active plan participants	($ 26,351,753)
d. Total	($ 39,021,174)
2. Plan assets at fair value	$ 0
3. APBO in excess of plan assets	($ 39,021,174)
4. Unrecognized net loss (gain)	($ 2,874,270)
5. Unrecognized prior service cost	$ 0
6. Unrecognized transition obligation	$ 27,197,896
7. Prepaid (accrued) postretirement benefit cost	($ 14,697,548)

B. Net periodic postretirement benefit cost:

1. Service cost	$ 1,181,652
2. Interest cost	$ 2,046,617
3. Actual return on plan assets	$ 0
4. Amortization of transition obligation	$ 1,699,869
5. Net amortization and deferral	($ 812,347)
6. Net periodic postretirement benefit cost	$ 4,115,791

C. Other disclosure information:

1. Health care cost trend rates at December 31, 1996:	
a. for year beginning at January 1, 1997	6.96%
b. ultimate rate	6.00%
c. year ultimate rate is reached	2000
2. Effect of 1% increase in health care cost trend rates:	
a. on APBO at December 31, 1996	$ 2,920,254
b. on aggregate of 1996 service and interest costs	$ 391,143
3. Discount rate at December 31, 1996	7.50%

February 17, 1997

DUQUESNE LIGHT COMPANY

C. - Summary of Filing

8. Explain what assumptions were made with regard to Operations & Maintenance expenses for the base year related to the level or number of employee vacancies. For example, were the budgeted positions assumed to be filled or was an historical average level of vacancies reflected? Explain.

Response:

No adjustments were made to the base year related to employee vacancies.

DUQUESNE LIGHT COMPANY

C. - Summary of Filing

9. Identify the budgeted employee positions for the base year which are not currently filled. For each position, provide the wage expense included in the base year, whether the position is a new position or a position vacated by the departure or transfer of a previous employee, and the date at which the position is expected to be filled.

Response:

The Company did not budget employee positions for the base year which are not currently filled.

DUQUESNE LIGHT COMPANY

C. - Summary of Filing

10. Provide the following labor data for the base year:

(a) Number of budgeted and actual employees broken down between category type used by the company by functions (e.g., union, non-union, salaried, hourly, temporary, etc.).

(b) Regular payroll broken down between expenses, capitalized, and other.

(c) Overtime payroll broken down between expenses, capitalized, and other.

(d) Temporary payroll broken down between expenses, capitalized and other.

(e) Other payroll (specify) broken down between expenses, capitalized, and other.

Response:

See Schedule A attached for information supporting question (a).

See Schedule B attached for information supporting questions (b), (c), (d) and (e).

Schedule A

(a) Number of actual employees broken down between category type used by the company by functions are:

Management/ Union	Hourly/Salary	Status	Actual Employees
Management	Salary	Regular	1,397
Management	Hourly	Part-time	2
Management	Hourly	Regular	1
Management	Hourly	Select-Time	19
	Total Management Hourly		22
Union	Salary	Regular	768
Union	Hourly	Part-Time	53
Union	Hourly	Regular	1,245
	Total Union Hourly		1,298

Note: The company did not budget employees for the base year.

Schedule B

Payroll Broken Down By Category Noted

	Expenses	Capitalized	Other	Total
(b) Regular Payroll	$93,458,391	$14,946,054	$19,621,476	$128,025,921
(c) Overtime Payroll	12,353,240	2,154,871	1,120,325	15,628,436
(d) Temporary Payroll	126,765	0	20,175	146,940
(e) Other Payroll	0	0	0	0
Total	$105,938,396	$17,100,925	$20,761,976	$143,801,297

DUQUESNE LIGHT COMPANY

C. - Summary of Filing

11. Provide the percentage wage rate increases granted by the company by date and employee classification for the base year.

Response:

The percentage wage rate increases granted by the company in 1996 were:

Date	Employee Classification	Percentage
April 1, 1996	Management	3%
October 1, 1996	Union	3%

DUQUESNE LIGHT COMPANY

C. - Summary of Filing

12. Identify the amount of overtime and show the percent of payroll the base year.

Response:

The amount of overtime and the percentage of payroll for 1996 are as follows:

(a) Salary Payroll

Regular Payroll	$108,155,895
Overtime Payroll	$ 9,254,671

Overtime percent of payroll equals 7.9%.

(b) Hourly Payroll

Regular Payroll	$45,344,820
Overtime Payroll	$15,442,523

Overtime percent of payroll equals 25.4%.

DUQUESNE LIGHT COMPANY

C. - Summary of Filing

13. Provide the operation and maintenance expense allocation percentage for payroll and benefits by function and allocated by transmission, distribution and generation and explain the method and basis of such allocation.

Response:

The operation and maintenance expense allocation percentage for benefits by function and allocated by transmission, distribution and generation can be found on Schedule A attached.

The allocation is based on actual labor dollars. Fringe benefits are distributed using these same percentages.

Schedule A

Operation & Maintenance Expense

		Amount	Percent
Transmission			
	Labor	2,304,753	21.33%
	Other than labor	8,498,569	78.67%
	Total	10,803,322	100.00%
Distribution			
	Labor	20,026,790	54.02%
	Other than labor	17,044,518	45.98%
	Total	37,071,308	100.00%
Generation			
	Labor	42,270,373	11.50%
	Other than labor	325,182,966	88.50%
	Total	367,453,339	100.00%
Labor			
	Transmission	2,304,753	2.18%
	Distribution	20,026,790	18.93%
	Generation	42,270,373	39.95%
	Other	41,209,715	38.94%
	Total	105,811,631	100.00%
Fringes			
	Payroll Taxes (408.01, .02 & .03)	8,269,736	
	Injuries & Damages (50-925)	790,089	
	Pensions (60-926)	5,689,787	
	Hospitalization (50-926)	11,937,059	
	Total	26,686,671	
	Transmission	581,769	
	Distribution	5,051,787	
	Generation	10,661,325	
	Other	10,391,790	
	Total	26,686,671	

DUQUESNE LIGHT COMPANY

C. - Summary of Filing

14. Identify the total revenues associated with bad debt write-offs for the base year. If the company relates bad debts to other than total sales to ultimate customers, specify what revenues are utilized.

Response:

The company relates bad debts to sales to ultimate customers. See response C-15.

DUQUESNE LIGHT COMPANY

C. - Summary of Filing

15. Provide the following information for the base year by customer class:

(a) Total gross write-offs of uncollectible accounts
(b) Total recoveries of uncollectible accounts
(c) Net write-offs of uncollectible accounts
(d) Total revenues
(e) Method and rate of accrual

Response:

Information for (a), (b), (c) and (d) for the base year by customer class can be found on Schedule A attached.

Information for (e) for the base year can be found on Schedule B attached.

SCHEDULE A

UNCOLLECTIBLE ACCOUNT INFORMATION
FOR THE YEAR 1996

	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TOTAL
Gross write-offs	$12,706,301	$1,040,888	$422,703	$14,169,892
Total recoveries	3,323,411	453,198	90,042	3,866,651
Net write-offs	$9,382,890	$587,690	$332,661	$10,303,241
Total revenues	$405,392,000	$489,646,000	$190,723,000	$1,085,761,000

SCHEDULE B

METHOD OF CHARGE-OFF ACCRUAL

History

Beginning January 1, 1994, all accounts were tagged and any future increases in account balances were recorded.

Beginning in 1995

a) The account balance of the active residential >120 day customers less any reserve plus all inactive accounts >60 days less any reserve and less recoveries are reflected in the collection costs.

b) Charge-offs are handled on an account by account basis as follows:

- Charge-offs already reserved for are written off against the reserve.
- Charge-offs not previously reserved for, in excess of the monthly addition to reserve, increase collection costs.
- Recoveries offset any increase in collection expense.

c) Any growth in the active residential accounts >120 days plus the inactive >60 day accounts and the losses related to the <60 day category is not expected to be more than >.75% - 1% of Billings.

DUQUESNE LIGHT COMPANY

C. - Summary of Filing

16. Provide a comparison of the actual and budgeted vegetation control/tree trimming costs for the base year.

Response:

Actual vegetation control/tree trimming costs for 1996	$10,184,000
Budgeted vegetation control/tree trimming costs for 1996	$10,147,000

DUQUESNE LIGHT COMPANY

C. - Summary of Filing

17. List and explain the nonrecurring or extraordinary expenses incurred in the base year and the expenses included in the base year which do not occur yearly but are of a nature that they do occur over an extended period of years, e.g., nonyearly maintenance programs.

Response:

See response at A5.

DUQUESNE LIGHT COMPANY

C. - Summary of Filing

18. As a separate item, list extraordinary property losses related to property previously included in the cost of service when the gain or loss on this property has occurred in the base year. Submit supporting data for each such extraordinary loss.

Response:

The Company had no such extraordinary losses during the base year.

DUQUESNE LIGHT COMPANY

C. - Summary of Filing

19. Submit schedules for the base year showing by major components, if included in claimed base year expenses, the expenses incurred in each of the following expense categories:

(a) Miscellaneous general expenses, including Account 930
(b) Regulatory commission expenses.
(c) Advertising expenses, including advertising engaged in by trade associations whenever the utility has claimed a contribution to the trade association as a ratemaking claim -- provide explanation of types and purposes of such advertising
(d) Research and development expenses -- provide a listing of major projects
(e) Charitable and civic contributions, by recipient and amount

Response:

Schedules for 1996 related to the above request are as follows:

(a) Miscellaneous general expenses. See Schedule A.
(b) Regulatory commission expenses. None.
(c) Advertising expenses. See Schedule B.
(d) Research and development expenses. See Schedule C.
(e) Charitable and civic contributions. See Schedule D.

Schedule A

General and Administrative Expenses - Jointly Owned Stations	$9,779,369
Other Experimental and General Research Expenses	2,893,866
Incentive Compensation	2,423,134
Customer Advanced Reliability System Project	1,594,881
Relocation Expenses	952,749
Publishing and Distributing Information and Reports to Stockholders; Trustee, Registrar, and Transfer Agent Fees and Expenses, and Other Expenses of Servicing Outstanding Securities of the Respondent	659,708
Industry Association Dues	576,844
Community Relations	312,727
Directors Expenses	297,064
Miscellaneous	1,101,429
TOTAL	$20,591,771

SCHEDULE B

PUC Transition Filing
Operating and Maintenance
Advertising Expenses
12/31/96

Vendor	Description of Services	Amount
Dymun-Nelson	Provide advertising support for marketing sales and brand management	$1,421,791
	Provide advertising support in conjunction with the "Positioning Choice of Electricity"	92,925
St. George Group	Develop and implement advertising and public relations campaigns for DLC	247,658
Skeetski & Oltmanns	Expertise required in helping to develop and implement an environmental awards program and dinner	175,153
Barakat & Chamberlin, Inc.	Provide marketing consulting services	101,490
Hallmark Tassone	Provide full advertising and public relations services	49,032
Metropolitan Pittsburgh Public Broadcasting	Environmental report in Pittsburgh Magazine	25,000
Various Vendors	Miscellaneous Advertising Expenses	25,926
	TOTAL	$2,138,975

Schedule C

Research and Development Expenses
1996

Description	Amount
Research Support to the Electric Power Research Institute	$2,908,594
Global Information System (GIS) - Global Positioning System (GPS) Acquisition and Application Development	831,196
Customer Advanced Reliability System - Data Communications Link	745,843
Research Support to Edison Electric Institute	482,311
Plant Specific Simulator to Improve Operator Efficiency at Fossil Stations	478,710
Ball/Tube Mill Optical Sensors - EPRI Funding	129,196
Remote Automation of Sectionalizers Using Wireless Communications	116,603
Passavent Hospital Medical Waste Bio-Oxidizer	105,000
Underground Event Research & Experiments	50,000
Customer Service - Flex Coord. Summary Billing	45,387
Remote Communications System Development	40,289
ECSIS Replacement (COGITO Simple Demo)	33,614
Rocket Triggered Lightning Tests	25,000
Pilot Plant Demonstration of Ozone Technology for Pgh. Water Authority	25,000
Microwave Oil/Water Sludge Processing	20,000
Information Strategies for Environmental Excellence	17,500
System Studies and Research	8,161
Line Monitoring and Feasibility Study	6,638
Resource Allocation Framework	5,596
Install Battery Monitor System to Substations	3,980
Pipe Type Cables - Analysis of Gases in Oil	160
Elrama #3 Boiler Air Preheater Seal Improvement	105
Phosphoric Acid Fuel Cell Demonstration	(8,791)
Precombustion Control of Air Toxins	(18,122)
Customer Service - Power Outage Detection	(34,782)
Distribution System Integrated Communications	(200,000)
TOTAL	$5,817,188

SCHEDULE D

CONTRIBUTIONS

MANCHESTER CRAFTMENS GUILD	$15,000.00
THREE RIVERS LECTURE SERIES	9,000.00
PITTSBURGH PIRATES BASEBALL CLUB	8,000.00
EASTER SEAL SOCIETY	7,500.00
ALZHEIMERS ASSOCIATION	6,000.00
PITTSBURGH DANCE COUNCIL	6,000.00
PERSAD CENTER, INC	5,000.00
A VERY SPECIAL ARTS PENNSYLVANIA	5,000.00
RADIO INFORMATION SERVICE	4,900.00
MANCHESTER CRAFTSMENS GUILD	4,600.00
JR. ACHIEVEMENT OF S.W. PENNSYLVANIA	3,000.00
OASIS (THEATRE PROGRAM SUPPORT)	3,000.00
YMCA OF METROPOLITAN PITTSBURGH	2,500.00
GIRL SCOUTS OF SOUTHWESTERN PA	2,500.00
CARNEGIE MELLON UNIV. GRAD. SCH. OF INDUSTRIAL ADM.	2,500.00
PAPPANS FAMILY RESTAURANT	2,500.00
CARNEGIE LIBRARY OF PITTSBURGH	2,500.00
PITTSBURGH ACTION AGAINST RAPE	2,000.00
THE CHILDREN'S CENTER OF PITTSBURGH	2,000.00
EXTRA MILE EDUCATION FOUNDATION	2,000.00
PHIPPS CONSERVATORY	2,000.00
GREATER PITTSBURGH COMMUNITY FOOD BANK	1,500.00
MCGUIRE MEMORIAL FOUNDATION	1,500.00
THREE RIVERS LECTURE SERIES	1,450.00
YOUTH GUIDANCE, INC.	1,250.00
TECH-LINK (CORPORATE CITIZEN WARD DINNER)	1,250.00
GIRLS HOPE OF PITTSBURGH , INC	1,200.00
MAGEE WOMEN'S HOSPITAL	1,000.00
HABITAT FOR HUMANITY OF BEAVER COUNTY	1,000.00
PITTSBURGH POST-GAZETTE	1,000.00
POINT PARK COLLEGE	1,000.00
EPILEPSY FOUNDATION OF WESTERN PA.	1,000.00
MAKE-A-WISH-FOUNDATION	1,000.00
PROJECT BUNDLE-UP	1,000.00
PRESENTS FOR PATIENTS	1,000.00
CENTRAL NORTHSIDE READING IS FUNDAMENTAL	1,000.00
UNIVERSITY PEDIATRICS ASSOCIATES	1,000.00
CELEBRATING THE WOMAN ENTREPRENEUR	1,000.00
BIG BROTHERS AND BIG SISTERS OF GR. PGH	1,000.00
CARNEGIE LIBRARY OF PITTSBURGH	1,000.00
AMERICAN CANCER SOCIETY	1,000.00
CYSTIC FIBROSIS FOUNDATION	1,000.00
CITY THEATRE COMPANY INC.	1,000.00
CORPORATION FOR OWNER-OPERATED PROJECTS`	1,000.00
QUAKER VALLEY CHAMBER OF COMMERCE	1,000.00
MENTAL HEALTH ASSOC. IN BEAVER COUNTY	1,000.00
CATHOLIC CHARITIES	1,000.00
CCAC EDUCATION FOUNDATION	800.00

CONTRIBUTIONS

HEALTH EDUCATION CENTER	$750.00
DEVELOPMENT CORPORATION FOR ISRAEL	750.00
THE RENAISSANCE & BAROQUE SOCIETY OF PGH	675.00
CENTER FOR CORPORATE COMMUNITY RELATIONS	650.00
WOMEN OF SPIRIT	600.00
UNIVERSITY OF PITTSBURGH	600.00
GREATER PITTSBURGH COMMISSION FOR WOMEN	526.00
NORTHSIDE LEADERSHIP CONFERENCE	500.00
NATIONAL KIDNEY FOUNDATION	500.00
THE CHILDREN'S CENTER OF PITTSBURGH	500.00
PACK 31, BOY SCOUTS	500.00
S.H.O.U.T. (CONFERENCE FEE- H/R RELATED)	500.00
SOUTH HILLS HEALTH SYSTEM FOUNDATION	500.00
SOUTH HILLS AREA YMCA	500.00
PITTSBURGH JOB CORPS CENTER	500.00
MON YOUGH CHAMBER OF COMMERCE	500.00
YWCA (FULL PAGE AD CELEBRATING "THE WOMAN ENTREPRENEUR"	500.00
CHARTIERS VALLEY SCHOOL DISTRICT	500.00
BIG KNOB GRANGE	500.00
GLASSPORT CENTRAL ELEMENTARY	500.00
CHRISTMAS IN APRIL * PITTSBURGH	500.00
HILLTOP-MT. WASHINGTON MEALS ON WHEELS	500.00
EAST COMMUNITIES YMCA	500.00
MCKEESPORT SYMPHONY	365.00
ALLEGHENY HISTORIC PRESERVATION SOCIETY, INC.	325.00
DUQUESNE UNIVERSITY	300.00
GOODWILL INDUSTRIES	300.00
ALLEGHENY COUNTY BAR ASSOCIATION	300.00
PITTSBURGH CHILDREN'S MUSEUM	300.00
PENNSYLVANIA ASSOCIATION FOR VOLUNTEERISM	300.00
MIDWEST AREA ASSOCIATION	300.00
ASC SAFETY SERVICE	276.00
THE CHILDREN'S FESTIVAL CHORUS	275.00
PENN STATE COOPERATIVE EXTENSION	275.00
THE GREAT RACE	272.00
COUNCIL CARE ADULT DAY SERVICES	250.00
MERCER SCHOOL HOUSE PROJECT	250.00
HEALTH EDUCATION CENTER	250.00
MON YOUGH RIVERFRONT ENTERTAINMENT & CULTURAL COUNCIL	250.00
CITY OF PITTSBURGH MARATHON, INC.	230.00
THE NEWS (HEARST CORPORATION PUBLICATION)	225.00
CANCER CARING CENTER	200.00
HOMESTEAD VOLUNTEER FIRE DEPARTMENT	200.00
STEEL VALLEY ALLIANCE AGAINST CRIME	200.00
RSVP	200.00
RENAISSANCE CENTER,	200.00
RAINBOW KITCHEN	200.00
CYSTIC FIBROSIS FOUNDATION	200.00

CONTRIBUTIONS

PITTSBURGH JOB CORPS CENTER	$200.00
RACE FOR THE CURE	180.00
INTERNATIONAL ASSOC. OF FIREFIGHTERS	175.00
BEAVER COUNTY ALCOHOL HIGHWAY SAFETY PROGRAM	166.66
CARNEGIE POLICE DEPARTMENT	150.00
SPRING GARDEN NEIGHBORHOOD COUNCIL	150.00
BIG KNOB PLAYGROUND	150.00
CARNEGIE LIBRARY OF HOMESTEAD	145.00
PRESSLEY RIDGE SCHOOLS`	125.00
GREATER PITTSBURGH COMMUNITY FOOD BANK	116.27
HABITAT FOR HUMANITY OF BEAVER COUNTY	100.87
BOYS AND GIRLS CLUBS OF WESTERN PENNSYLVANIA	100.00
OPERATION BETTER BLOCK	100.00
CARLOW COLLEGE(FULL PAGE AD-HEALTH POLICY CONF. PROG.	100.00
PITTSBURGH PERSONNEL ASSOCIATION	100.00
YMCA - WESTERN AREA	100.00
BEAVER VALLEY SPEBSQSA	80.00
VINTAGE	62.00
PA SOCIETY FOR THE ADVANCEMENT OF THE DEAF	60.00
PITTSBURGH EMPLOYEES ACTIVITIES ASSOCIATION	60.00
MILLER MELONE COMMUNICATION AND DESIGN	59.93
WOMEN'S CENTER OF BEAVER COUNTY	50.00
CARNEGIE LIBRARY OF MIDLAND	50.00
ST. BEDE SCHOOL	50.00
THE GREAT RACE	22.00
GRANTMAKERS OF WESTERN PENNSYLVANIA	15.00
RACE FOR THE CURE	10.00
	$148,231.73

DUQUESNE LIGHT COMPANY

C. - Summary of Filing

20. Provide an analysis by function of charges by affiliates, for the base year and the 12-month period immediately preceding the base year, for services rendered and included in the operating expenses of the filing company. Explain the nature of the service and the basis on which charges or allocations are made, including a copy of an applicable contract. Also, explain major variances in excess of 10% or over $1 million, whichever is less, between the charges for the base year and the corresponding charges for the 12-month period immediately preceding the base year.

Response:

See Schedule A attached.

Schedule A

Payments to Affiliates

Affiliate	Nature of Service	1996	1995
DQE	Payment of management fees. (A)	$4,098,041	$3,548,066
Chester Engineers, Inc.	Engineering Consultation Services (B)	$236,161	$404,552
Property Ventures, LTD	Rental of Property. (C)	$3,762,181	$2,993,783
Duquesne Enterprises (DE)	Duquesne Light's share of DE employee Long-Term Incentive Plan exercise. (D)	$4,330	$31,789
DQE	Duquesne Light's share of DQE employee Long-Term Incentive Plan exercise. (E)	$3,888	$ -0-

(A) Basis for allocation is the Massachusetts formula. The variance is due to the fact that costs incurred by DQE increased in 1996.

(B) Chester Engineers performs services for Duquesne Light Company for residual waste compliance at the various waste storage sites operated by Duquesne Light Company. The variance is due to reduced volume of work performed by Chester Engineers.

(C) The buildings are used for office space. Copies of the lease agreements are attached. The variance is due to the rental payments related to the 411 Seventh Avenue building beginning in late 1995.

(D) Employee originally worked for Duquesne Light and is now employed by DE. Duquesne reimburses DE who in turn pays the employee. Amount is based on dividends declared and appreciation in value of stock. The variance is due to fewer shares being exercised in 1996.

(E) Employee worked for Duquesne Light until 1996. Employee is now employed by DQE. Amount is based on dividends declared and appreciation in value of stock. The variance is due to the fact that this was effective in 1996.

SYSTEM CONTROL CENTER LEASE AND SUBLEASE AGREEMENT

MELLON-STUART REALTY CO.
Landlord

DUQUESNE LIGHT COMPANY
Tenant

Dated as of June 1, 1977

SYSTEM CONTROL CENTER LEASE
AND SUBLEASE AGREEMENT

TABLE OF CONTENTS

SYSTEM CONTROL CENTER LEASE AND SUBLEASE AGREEMENT

THIS AGREEMENT made and entered into as of the 1st day of June, 1977, by and between MELLON-STUART REALTY CO., a Pennsylvania business corporation (hereinafter sometimes called the "Landlord"), party of the first part;

A
N
D

DUQUESNE LIGHT COMPANY, a Pennsylvania business corporation (hereinafter sometimes called the "Tenant"), party of the second part.

WITNESSETH:

WHEREAS, by Land Lease Agreement dated as of March 30, 1976 (hereinafter, together with any amendments or modifications, sometimes called the "Land Lease"), Landlord has leased from Tenant, a certain piece or parcel of land situate in the 27th Ward of the City of Pittsburgh, Allegheny County, Pennsylvania, and more particularly described in Appendix A attached hereto and made a part hereof (hereinafter sometimes called the "Land");

WHEREAS, Landlord has erected on the Land certain improvements for Tenant consisting of a System Control Center (hereinafter sometimes called the "Improvements") in accordance with drawings and specifications prepared by Williams, Trebilcock and Whitehead, A.I.A., and in part by James S. Campbell, such plans and specifications being incorporated herein by reference thereto,

WHEREAS, Tenant is desirous of subleasing from Landlord the Land and of leasing from Landlord the Improvements and Landlord is willing to sublease and lease the same to Tenant upon the terms and conditions hereinafter set forth;

NOW, THEREFORE, in consideration of the premises, Landlord and Tenant, intending to be legally bound hereby, do agree that Landlord, for and in consideration of the rents, covenants and agreements hereinafter reserved on the part of Tenant to be paid, kept and performed, does hereby demise and lease to Tenant and Tenant does hereby take and hire from Landlord (a) the Improvements, (b) the leasehold estate of the Landlord in the Land, and (c) all the right, title and interest of Landlord in and to any appurtenances thereto, subject to the terms and provisions of the Land Lease and that certain mortgage dated June 15, 1977 (hereinafter sometimes called the "Mortgage"), securing a promissory note in the principal amount of $3,900,000 from Landlord to The Western Saving Fund Society of Philadelphia, ad valorem taxes and assessments, zoning ordinances and all matters of record, to have and to hold the Improvements, such leasehold estate and appurtenances, subject as aforesaid, unto Tenant for a term commencing on June 15, 1977, and expiring on the thirty-first day of December, 2007, unless this agreement shall sooner terminate as hereinafter provided, or shall be renewed as hereinafter provided, upon the following covenants, agreements, terms, provisions, conditions and limitations as follows:

Page

3

Missing

payment shall be legal tender for the payment of public and private debts, at the principal office of Landlord, 1425 Beaver Avenue, Pittsburgh, Pennsylvania 15233, or at such other place as Landlord may from time to time specify by notice given pursuant to Section 18.01 hereof, and to the attention of such officer or other person as Landlord may by like notice from time to time designate, during the term, net rent (hereinafter sometimes called the "Net Rent") of Four Hundred Twenty-eight Thousand Dollars ($428,000) per annum.

Such Net Rent shall be in addition to all other payments to be made by Tenant as hereinafter provided and shall be paid in equal monthly installments of Thirty-five Thousand Six Hundred Sixty-six and Sixty seven One-Hundredth Dollars ($35,666.67), each on the first day of each calendar month during the term of this agreement commencing on August 1, 1977.

Section 2.02 The Net Rent shall be paid to Landlord without notice or demand and without abatement, deduction or setoff.

ARTICLE III

Use of Premises, Repair and Maintenance

Section 3.01 The Land and the Improvements shall be used only for the operation of a System Control Center by Tenant and for no other purpose without the express written consent of Landlord. Tenant shall conform with all applicable statutes, ordinances, rules and regulations, and shall defend, indemnify and hold Landlord harmless from all expenses, liabilities or claims of liability by reason of any violations thereof.

Section 3.02 Tenant, at its sole cost and expense, shall keep and maintain the Land and the Improvements and all appurtenances thereto, and the parking areas, roadways, sidewalks and other passageways, to the extent they are subject to the control of Tenant and each and every part thereof, in good order and repair and in an attractive, safe and sanitary condition.

Section 3.03 Tenant, at its sole cost and expense, may make such alterations, improvements, additions and new construction, structural or otherwise, in and to the Land and the Improvements and may erect or install in connection therewith additional structures, improvements, fixtures, machinery and equipment; provided, however, that any such alterations, improvements, additions and construction shall not change the general character of the Land and the Improvements or adversely affect their market value. Any fixtures, equipment, machinery and other property erected or installed on the Land and the Improvements and used in the operation of the Tenant's business shall remain the property of the Tenant.

Section 3.04 Except in connection with its obligations to erect the Improvements, Landlord shall not be required to furnish any services or facilities or to make any repair or alterations in or to the Land or the Improvements throughout the term of this agreement.

ARTICLE IV

Mechanics' Liens

Section 4.01 Tenant shall keep the Land and the Improvements free and clear of mechanics' liens and other liens of a similar nature which

may arise in connection with the work of any character performed on the Land or the Improvements by or at the direction or sufferance of Tenant, other than in connection with the erection of the Improvements. In the case of all erection, construction, alterations or repairs involving Five Thousand Dollars ($5,000.00) or more, Tenant shall cause a no-lien agreement which shall specifically protect the interests of Landlord, Tenant and the owner of the fee of the Land to be executed by the party performing such work before any work is begun or materials delivered to the Land. If, despite such no-lien agreement, or in the case of construction involving less than Five Thousand Dollars ($5,000.00), one or more mechanics' liens are filed against the interest of Landlord, Tenant or such owner of the Land, Tenant shall notify Landlord thereof promptly and either pay the amount claimed or otherwise obtain the discharge of such lien promptly. On final determination of the lien or claim for lien, Tenant shall immediately pay any judgment rendered with all proper costs and charges and shall have the judgment satisfied and lien released of record at Tenant's expense. If any such lien shall be placed on the Land or the Improvements and the same ripen into a judgment which becomes final, Landlord, at its option, may pay any such final judgment and clear the Land or the Improvements and any monies so expended by Landlord on account of any such judgment from its own funds shall be repaid by Tenant to Landlord forthwith upon demand, and in every such instance the legality and validity of any such payment to the full amount paid or expended by Landlord and the regularity of all proceedings had in respect thereof or toward the enforcement thereof shall, as between Landlord and Tenant, be conclusively deemed to exist.

ARTICLE V

Taxes and Assessments and Utility Charges; Interruption of Utility Services

Section 5.01 Tenant shall reimburse Landlord for all taxes, assessments and levies paid by Landlord, whether general or special, ordinary or extraordinary, of every nature or kind whatsoever, whether imposed by the Commonwealth of Pennsylvania or any political subdivision thereof, upon or against this agreement or all or any part of the Improvements or the occupancy, use or possession thereof; provided, however, that any such amounts for the first and last year of the term hereof shall be prorated between the parties. Tenant shall promptly reimburse Landlord for such amount immediately following demand by Landlord. The responsibility for the payment of all taxes, assessments and levies upon or against all or any part of the Land, or the occupancy, use or possession thereof shall be that of the owner of the fee of the Land.

Section 5.02 Nothing herein contained shall be construed to require Tenant to pay any transfer, estate, inheritance, succession, or gift tax or taxes imposed in respect of any devise or gift of any interest of Landlord or of its successors or assigns in the Land or the Improvements, nor any income tax imposed in respect to Landlord's income from the Land or the Improvements.

Section 5.03 Tenant shall have the right to contest in the name of Landlord the legality or validity of any of the taxes, assessments or levies herein provided to be reimbursed to Landlord. In the event that any such contest is made by Tenant, Landlord shall cooperate with Tenant therein by promptly executing all required documents and taking such other actions as are reasonably required to enable Tenant to prosecute such contest. Tenant shall, within five (5) days after final determination of such contest adversely to Tenant, fully reimburse Landlord for any amount involved in or affected by any such contest, together with all penalties, fines, interests, costs or expenses that may have accrued thereon or that may result from any such action by Tenant.

Section 5.04 If permitted under the laws and regulations relating thereto, the Land shall be assessed for the purposes of taxation in the name of the owner of the fee and the Improvements shall be assessed in the name of Landlord.

Section 5.05 Landlord shall promptly deliver to the owner of the fee any and all tax notices or assessments which it may receive relating to the Land and Tenant shall deliver to Landlord any such notice or assessments which it may receive relating to the Improvements.

Section 5.06 Tenant shall pay directly to the public utility companies or governmental bodies or authorities all charges for utilities in connection with its use or occupancy of the Land or the Improvements and shall indemnify Landlord against liability therefor. If any such charges are not paid when due, Landlord may at its option pay same, and any amounts so paid by Landlord shall be paid by Tenant to Landlord immediately upon demand therefor. Tenant shall show to Landlord upon request receipts for utility charges paid by Tenant.

Section 5.07 Landlord shall not be liable to Tenant or to anyone claiming under, by or through Tenant for the quality or quantity, or for any failure or interruption, of any utility service being furnished to Tenant by a public utility company or governmental body or authority, and no such failure or interruption shall be breach of this agreement or otherwise entitle Tenant to terminate this agreement.

ARTICLE VI

Public Liability and
Property Damage

Section 6.01 Tenant shall protect, indemnify and save harmless Landlord from and against any and all losses, damages, costs, expenses, liabilities, claims, demands and causes of action of any nature whatsoever, and any expenses incidental to the defense thereof by Landlord for injury to or death of persons or loss or damage to property occurring on the Land or the Improvements or in any manner directly or indirectly growing out of or in connection with the use and occupancy or disuse of the Land or the Improvements or any part thereof by Tenant or any person or persons invited, suffered or permitted by Tenant to go or to be in or upon the Land or the Improvements.

Section 6.02 As security for the foregoing but in no wise as a limitation thereupon, Tenant shall, at its sole cost and expense, procure and keep in effect during the term or terms of this agreement the following insurance policies with insurance companies satisfactory to Landlord:

(a) Comprehensive general public liability insurance against any and all claims or demands whatsoever arising out of or in any way connected with the operation and use of the Land and the Improvements by Tenant with minimum limits of Five Hundred Thousand Dollars ($500,000.00) for injury or death of one person in each accident or occurrence and One Million Dollars ($1,000,000.00) for injury to or death of more than one person in each accident or occurrence and Two Hundred Fifty Thousand Dollars ($250,000.00) for property damage in each accident or occurrence.

(b) Workmen's compensation insurance and any other insurance as shall be required by any statute, ordinance, rule or regulation of any governmental body in connection with the operation and use of the Land or the Improvements by Tenant.

(c) Any other insurance which Landlord shall reasonably require to protect itself against any liability assumed by Tenant under this agreement or in connection with the use and occupancy by Tenant of the Land or the Improvements.

(d) Landlord and the owner of the fee of the Land shall be named as additional insureds on all such insurance policies without cost or expense to Landlord or such owner and copies or certificates of all such policies shall be delivered to Landlord. Such policies shall further require that at least ten (10) days' notice of cancellation be sent to Landlord and the owner of the fee.

(e) If Tenant shall fail to obtain or maintain any such insurance, Landlord may, at its option, obtain or maintain any such insurance and Tenant shall reimburse Landlord for the cost thereof immediately upon demand therefor.

(f) Notwithstanding the foregoing, Tenant may be a self-insurer to such extent as Tenant may reasonably desire, subject to any insurance requirements of the Mortgage.

ARTICLE VII

Fire Insurance

Section 7.01 Tenant, at its sole cost and expense, will keep the Improvements insured against loss by fire in an amount sufficient to prevent Landlord or Tenant from becoming co-insurers of any loss, subject to any applicable deductible. Such insurance shall be carried with responsible insurance companies and in amounts reasonably acceptable to Landlord and the holder of the Mortgage. Subject to the rights of the holder of the Mortgage, the policies evidencing such insurance shall be so issued as to cover the several interests of Landlord and Tenant and shall provide that in case of loss or damage the proceeds of such insurance shall be payable to Tenant. Such proceeds shall be held by Tenant under the provisions of Section 8.02 hereof.

Section 7.02 The policy or policies evidencing all insurance which Tenant is required to provide and maintain in effect hereunder shall be delivered to Landlord from time to time as issued, except that certificates of insurance may be substituted for such policy or policies, and if Tenant shall fail to provide, maintain or pay for any of the insurance hereinabove provided for, Landlord may, at its option, procure such insurance. Any sums paid out by Landlord for any such insurance shall be repaid by Tenant to Landlord immediately upon demand therefor.

ARTICLE VIII

Damage or Destruction

Section 8.01 In the event of any fire or other casualty to the Improvements resulting in substantial damage or destruction to the Improvements, Tenant shall have the option of (a) restoring, repairing, rebuilding or altering

the Improvements, or (b) terminating this agreement by written notice to Landlord within ninety (90) days of such damage or destruction. Upon the termination of this agreement by reason of such damage or destruction, the Net Rent provided to be paid by Tenant shall be apportioned and paid to the date of such termination. In the absence of such termination by Tenant no damage or destruction of the Improvements or any part thereof by fire or other casualty shall terminate or permit Tenant to surrender this agreement, or shall release Tenant from its liability to pay the full Net Rent and other amounts payable hereunder, and Tenant waives any rights now or hereafter conferred upon it by statute or otherwise to quit or surrender this agreement or the Land or any part hereof, or to any suspension, diminution, abatement or reduction of rent on account of any such destruction or damage.

Section 8.02 In the event of the termination of this agreement by reason of the damage to or destruction of the Improvements or any part thereof by fire or other casualty as provided in Section 8.01 hereof, Tenant shall be entitled to all the proceeds, if any, of casualty insurance with respect to the Improvements and Tenant shall pay to the holder of the Mortgage the amount then required to pay in full and discharge the Mortgage. In such event, Landlord by appropriate instrument of assignment shall convey, assign and transfer and set over unto Tenant good, marketable and unencumbered title to the interests of the Landlord in the Land and the Improvements. In the absence of termination of this agreement in the event of such fire or other casualty, the Tenant shall be entitled to all the proceeds of such casualty insurance.

ARTICLE IX

Condemnation

Section 9.01 In the event that all or substantially all the Land and Improvements shall be taken in condemnation proceedings or by exercise of any right of eminent domain or by agreement between Landlord and Tenant, and those authorized to exercise such right, this agreement shall terminate and expire on the date of such taking and the Net Rent provided to be paid by Tenant shall be apportioned and paid to the date of such taking. For the purposes of this Section "substantially all the Land and Improvements" shall be deemed to have been taken if the portion of the Land and Improvements not so taken, and taking into consideration the amount of the net award available for such purpose, the Improvements cannot be so repaired or reconstructed as to constitute a complete structure capable of being operated, practically and economically by Tenant for a System Control Center. In such event, Tenant and the owner of the fee shall be entitled to collect from any condemnor the entire award that may be made in any such proceeding and Tenant and such owner of the fee shall pay to the holder of the Mortgage the amount then required to pay in full and discharge the Mortgage. Landlord shall execute any and all further documents that may be required in order to facilitate collection by Tenant of any and all such award and by appropriate instrument of assignment shall convey, assign, transfer and set over unto Tenant good, marketable and unencumbered title to the interest of the Landlord in the Land and the Improvements.

Section 9.02 If at any time during the term of this agreement, less than substantially all the Land and Improvements shall be taken as aforesaid, out

of the award or awards collected, there shall be first set aside for the owner of the fee the fair market value as determined in said proceeding of the Land so taken, with the Tenant entitled to any balance. In such event, Tenant shall continue to pay in full the Net Rent and other amounts payable hereunder without reduction or abatement and no such taking shall terminate or permit the Tenant to surrender this agreement.

ARTICLE X

Covenants Run With the Land

Section 10.01 All covenants, agreements and engagements contained in this agreement shall be construed as covenants running with the land, and all rights given to and obligations imposed on the respective parties shall be construed as inuring to and binding upon the successors in interest and assigns of the parties hereto.

ARTICLE XI

Defaults and Remedies

Section 11.01 The occurrence of any one or more of the following events shall constitute a default or breach of this agreement by Tenant if the same shall continue for thirty (30) days following notice thereof from Landlord to Tenant:

(a) The failure of Tenant to pay, when due, all or any part of the Net Rent or other sums payable hereunder.

(b) The failure of Tenant to observe or perform any of the other covenants, conditions or agreements of this agreement to be kept, observed or performed by Tenant upon the expiration of any period specifically allowed therefor in this agreement, provided,

however, that Tenant shall have deemed to have complied with such notice so long as it has commenced to comply with such notice within the period set forth therein and is diligently attempting to comply with such notice.

(c) The making by Tenant of any assignment for the benefit of creditors, the adjudication that Tenant is bankrupt or insolvent, the filing by or against Tenant of a petition to have Tenant adjudged a bankrupt or a petition for reorganization or arrangement under any law relating to bankruptcy (unless, in the case of a petition filed against Tenant, the same is dismissed within sixty (60) days after the filing thereof), the appointment of a trustee or receiver to take possession of substantially all of Tenant's assets located on the Land or in the Improvements, or of Tenant's interest in this agreement (unless possession is restored to Tenant within sixty (60) days after such appointment), or the attachment, execution or levy against, or other judicial seizure of, substantially all of Tenant's assets located in or upon the Land or the Improvements or of Tenant's interest in this agreement (unless the same is discharged within sixty (60) days after issuance thereof).

Section 11.02 In the event of any default or breach of this agreement by Tenant there shall become immediately due and payable as rent under this agreement, as if by the terms hereof same were all payable in advance, a sum equal to all Net Rent for all calendar years and fractions thereof remaining in the balance of the term of this agreement

as of the date of default. Tenant shall be obligated for such accelerated rent regardless of which, if any, of the remedies provided in Section 11.03 hereof or provided by law or equity Landlord shall elect to pursue.

Section 11.03 In the event of any default or breach of this agreement by Tenant, Landlord, at its option, may terminate this agreement upon and by giving written notice of termination to Tenant, or Landlord without terminating this agreement may at any time after such default or breach, without notice or demand additional to that provided in Section 11.01 hereof, enter the Land and the Improvements, with or without process of law and, without thereby incurring any liability to Tenant, take possession of the Land and the Improvements and of all personal property of every kind on the Land and the Improvements. Landlord may thereupon at any time, and from time to time, (i) collect the rent and profits which may otherwise accrue to Tenant from the use, enjoyment and operation of the Land and the Improvements, or (ii) relet the Land and the Improvements, or any part thereof, for the account of Tenant for such term, upon such condition and at such rents as Landlord may deem proper. All rents so collected by Landlord shall first be applied against such expenses as Landlord may have incurred in taking or recovering possession of the Land and the Improvements, taking the same in good order and condition, altering or repairing same for any reletting and such other expenses, commissions and charges including attorney's fees as Landlord may have paid or incurred in connection with any of the foregoing, and the balance shall be applied against such accelerated rents. Any tenants making such payment to Landlord shall be under no obligation to see to the application by Landlord of such rents nor shall Tenant have any right to collect any rents after such default for so long as the same shall continue. Tenant hereby waives the benefits of any statutes now in force or hereafter enacted exempting any property of any kind or value from levy and sale for rent.

11.04 All remedies provided in this agreement shall be taken and construed as cumulative, that is, in addition to every other remedy provided in this agreement or by law or equity. For purposes of the remedies of the Landlord, any sums payable by the Tenant in addition to the Net Rent shall be deemed additional rent hereunder.

ARTICLE XII

Options to Renew

12.01 If this agreement shall be in force and effect on the date hereof specified for the expiration of the original term, Tenant shall be entitled to a renewal of the term hereby granted for four additional renewal terms of five (5) years each, the first renewal term beginning with the expiration of the original term and the second, third and fourth renewal terms beginning with the expiration of the preceding renewal term; provided that Tenant shall have given Landlord at least one (1) year notice of such election to renew, but in no event more than two (2) years prior to the date of the expiration of the original term in the case of the first renewal or more than two (2) years prior to the expiration of the preceding renewal term in the case of the second, third and fourth renewal terms. Each renewal term shall be upon the same terms and conditions as those contained herein with respect to the original term.

ARTICLE XIII

Option to Purchase

Section 13.01 Landlord hereby grants to Tenant the option to purchase good, marketable and unencumbered title to (a) the leasehold interest of

Landlord in the Land and (b) the Improvements for a purchase price payable in cash and the assumption by Tenant of, and the release of Landlord from, all obligations of Landlord under the Land Lease. Tenant may exercise such option by giving written notice to Landlord at any time during the term of this agreement following the tenth anniversary of the date hereof and the sale and purchase contemplated hereby shall take place within thirty (30) days after the expiration of the lease year in which the option is exercised.

Section 13.02 The purchase price provided in Section 13.01 shall be the fair market value of the Improvements in their then condition as determined by a board of three real estate appraisers, each of which shall be members of the American Institute of Real Estate Appraisers or the American Society of Appraisers and shall have had at least ten years' experience in commercial real estate appraisal. One each of such appraisers shall be appointed by the Landlord and Tenant and the two so appointed shall appoint the third appraiser. All costs and expenses of such appraisers, together with any costs, taxes and recording fees applicable to the transfer of the leasehold interest of Landlord and the Improvements to Tenant shall be paid by Tenant. For purpose of this Section, fair market value shall mean the price at which such property in its then condition unencumbered by this agreement and the Mortgage would change hands between a willing buyer and a willing seller when the former is not under any compulsion to buy and the latter is not under any compulsion to sell. Notwithstanding the foregoing, in no event shall said purchase price be less than the amount then required to pay in full and discharge the Mortgage.

ARTICLE XIV

Waiver

Section 14.01 Except to the extent that Landlord may have otherwise agreed in writing, no waiver by Landlord of any breach by Tenant of any of its obligations, agreements or covenants hereunder shall be deemed to be a waiver of any subsequent breach of the same or any other covenants, agreements or obligations, nor shall any forbearance by Landlord to seek a remedy for any breach be deemed a waiver by Landlord of its rights or remedies with respect to such breach.

ARTICLE XV

Estoppel Certificates

Section 15.01 Each party agrees that at any time and from time to time, within twenty (20) days following written request from the other party, the party so requested shall execute and deliver to the other party a statement certifying that this agreement is in full force and effect and unmodified (or if there have been modifications, stating such), certifying the dates to which the Net Rent has been paid; and certifying whether or not, to the best of the knowledge of the party signing such certificate, the other party has failed or refused to perform any obligation contained, in this agreement, and if so, specifying the same.

Section 15.02 The failure of either party to furnish such statement within such twenty (20) day period shall be deemed to be an acknowledgment, by the party requested to give such statement, to any person entitled to rely thereon, that this agreement is in full force and effect and is unmodified, that such Net Rent has been duly and fully paid to and including the respective due dates immediately preceding the date of such request, and that the party requesting such statement has performed all obligations contained in this agreement to the date of such request.

ARTICLE XVI

Termination

Section 16.01 Unless Tenant exercises the option provided in Article XIII hereof, or as provided in Article VIII or Article IX hereof, at the termination of this agreement for any reason, Tenant and the tenants and subtenants under Tenant, and any and all persons holding or claiming under Tenant, shall surrender possession of the Land and the Improvements to Landlord, maintained as herein provided for, ordinary wear and tear and depreciation and damage by fire or other casualty excepted, and free of any and all claim thereto by Tenant or any party holding under Tenant.

Section 16.02 At any time during the term of this agreement, or upon termination for any reason and provided Tenant is not then in default hereunder, Tenant and the tenants and subtenants under Tenant and any and all persons holding or claiming under Tenant shall have the right to remove from the Land and the Improvements all their fixtures, equipment, machinery and all other property, provided, however, that Tenant or the person so removing such property shall repair any damage to the Land and Improvements by the removal thereof.

ARTICLE XVII

Invalidity of Particular Provisions

Section 17.01 If any term or provision of this agreement or the application thereof to any person or circumstance shall, to any extent, be invalid or unenforceable, the remainder of this agreement, or the application of such term or provision to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected thereby, and each term and provision of this agreement shall be valid and be enforced to the fullest extent permitted by law.

ARTICLE XVIII

Notices

Section 18.01 All notices, demands and requests required under this agreement shall be in writing. All such notices, demands and requests shall be deemed to have been properly given if served personally, or if sent by United States registered mail, postage prepaid, addressed as hereinafter provided. All such notices, demands and requests mailed to Landlord shall be addressed to Landlord at 1425 Beaver Avenue, Pittsburgh, Pennsylvania 15233, or at such other address (and addressed to the attention of such officer or other person) as Landlord may from time to time designate by written notice to Tenant. All such notices, demands and requests mailed to Tenant shall be addressed to Tenant at 435 Sixth Avenue, Pittsburgh, Pennsylvania 15219, or at such other address (and addressed to the attention of such officer or other person) as Tenant may from time to time designate by written notice to Landlord.

Section 18.02 Notices, demands and requests which shall be served by registered mail upon Landlord and Tenant in the manner aforesaid shall be deemed sufficiently served or given for all purposes hereunder at the time such notice, demand or request shall be mailed by United States registered mail as aforesaid in any post office or branch post office regularly maintained by the United States Postal Service.

ARTICLE XIX

Condition of and Title to Property
Quiet Enjoyment

Section 19.01 Landlord covenants and agrees that Tenant, upon payment of the Net Rent and other sums herein provided for and observing and keeping all covenants, agreements and conditions of this agreement on its part to be observed and kept, shall quietly have and enjoy the Land and the Improvements during the term of this agreement without hindrance or molestation by anyone claiming by, or through Landlord, subject, however, to the exceptions reservations and conditions of this agreement.

ARTICLE XX

Arbitration and Waiver of Jury Trial

Section 20.01 Except as otherwise provided in this Article, all disputes arising between Landlord and Tenant under this agreement shall be subject to arbitration in accordance with the provisions of this Article. All such disputes shall be submitted to the American Arbitration Association or its successor, and all proceedings shall be conducted

according to its rules except that the arbitrator shall be an attorney. No action at law or in equity in connection with any such dispute shall be brought until the arbitrator shall have rendered a decision in connection with such dispute or until arbitration thereof shall have been waived, either expressly or pursuant to Section 20.03 hereof.

Section 20.02 Tenant shall have no right to arbitrate with reference to the payment or non-payment of Net Rent unless on or before the due date thereof a written claim or setoff, specifying the ground therefor, has been given by Tenant to Landlord.

Section 20.03 All disputes subject to arbitration in accordance with this Article shall be raised by notice to the other party, which notice shall state with particularity the nature of the dispute and the demand for relief, making specific reference, by Article, Section and paragraph, to the provisions of this agreement alleged to give rise to the dispute. Such notice shall also refer to this Article and shall state whether the party giving notice demands arbitration. If no demand for arbitration is contained in such notice, the party against whom relief is sought shall have the right to give written demand for arbitration under this Section to the other party within thirty (30) days after such notice. Unless one of the parties thus demands arbitration, the provisions of this Article shall be deemed to have been waived.

Section 20.04 During any arbitration proceeding pursuant to this Article, the parties shall continue to perform and discharge all their respective obligations under this agreement. The performance of any obligation here-

under shall not be excused merely because a demand for arbitration affecting that performance has been made, nor shall a party exercise, prior to the rendering of a decision by the arbitrator in connection with such dispute, or prior to the expiration of any period of time established by the arbitrator for compliance with his decision, any other remedy which would destroy the efficacy of the arbitration proceeding.

Section 20.05 Landlord and Tenant shall and do hereby waive trial by jury in any action, proceeding or counterclaim arising out of or in any way connected with this agreement.

ARTICLE XXI

Disposition Contract

Section 21.01 This agreement is subject to the terms and conditions set forth in the Disposition Contract between the Urban Redevelopment Authority of Pittsburgh and Tenant dated March 30, 1976, which is incorporated herein by reference thereto, and if there is any conflict in the terms and conditions of this agreement and said Disposition Contract, then the terms and conditions of the Disposition Contract shall control.

ARTICLE XXII

Miscellaneous

Section 22.01 Immediately following the execution and delivery of this agreement, Landlord and Tenant shall execute, acknowledge and deliver the memorandum of lease in the form set forth in Exhibit I attached hereto and made a part hereof and shall cause the same to be recorded, at the cost of Landlord, in the office of the Recorder of Deeds of Allegheny County, Pennsylvania.

Section 22.02 The captions of this agreement and the table of contents preceding this agreement are for convenience and reference only and in no way define, limit or describe the scope or intent hereof.

Section 22.03 It is the intention of the parties hereto that as long as the Mortgage shall be outstanding the estate acquired hereunder by Tenant shall not merge with or into any other estate, whether lesser or greater, in the Land now held or hereafter acquired by Tenant or by any disclosed or undisclosed principal of Tenant.

Section 22.04 As used in this agreement, the words "term of this agreement" shall mean the original term hereof and any renewal term for which Tenant has exercised its option to renew as provided in Article XII hereof, or any holdover period of the original term or any renewal term.

Section 22.05 This agreement shall be construed and enforced in accordance with the laws of the Commonwealth of Pennsylvania.

Section 22.06 The covenants and agreements herein contained shall bind and inure to the benefits of Landlord, its successors and assigns, and Tenant, its successors and assigns, except as otherwise provided herein.

IN WITNESS WHEREOF, Landlord and Tenant have duly executed this Lease and Sublease Agreement the day and year first above written.

RSC
6-15-77

DUQUESNE LIGHT COMPANY

Attest:

Secretary

By _____
John H. Arthur
CHAIRMAN OF THE BOARD
AND CHIEF EXECUTIVE OFFICER

[Corporate Seal]

MELLON-STUART REALTY CO.

Attest:

Secretary

By _____
Vice President

[Corporate Seal]

PROPERTY DESCRIPTION

BEING a portion of Parcel No. 8-A and No. 8-B of the Urban Redevelopment Authority of Pittsburgh, Woods Run Redevelopment Project Penna. R-285 (part of Redevelopment Area No. 15), situate in the 27th Ward of the City of Pittsburgh, Allegheny County, Pennsylvania, more particularly bounded and described as follows:

BEGINNING at a point which point is distant the following six (6) courses and distances from a point on the Westerly right of way line of New Beaver Avenue at the dividing line between land of Duquesne Light Company and land conveyed by Urban Redevelopment Authority of Pittsburgh to Allegheny Drop Forge Company by deed dated August 1, 1974, and recorded August 2, 1974, in Deed Book Volume 5372, page 181, viz: (1) along the Westerly right of way line of New Beaver Avenue, North 28° 10' 59" West, 931.610 feet to a point of curve; (2) in a general Westerly direction by the arc of a circle curving to the left having a radius of 25 feet an arc distance of 33.080 feet to a point on the Southerly right of way line of Doerr Street (50 feet wide); (3) thence along the Southerly right of way line of Doerr Street, South 76° 00' 15" West, 361.011 feet to an angle point; (4) thence continuing along the Southerly right of way line of Doerr Street, South 79° 17' 13" West, 58.842 feet to a point; (5) thence by a line through land of which this is a part, said line being the centerline of a private road, 30 feet in width, South 28° 10' 59" East, 280.035 feet; (6) thence by a line in said private road, South 61°49' 01" West, 15.00 feet to a point in the Westerly line of said 30 foot private road and being the true point of beginning of the

leased premises; thence from said true point of beginning by the Westerly side of said 30 foot private road, South 28° 10' 59" East, 337.25 feet to a point; thence by a line through land of which this is a part, South 61° 49' 01" West, 303.61 feet to a point on line of land of the Pittsburgh and Western Railroad; thence by line of land of said Railroad, North 33° 43' 52" West, 338.84 feet to a point; thence by a line through land of which this is a part, North 61° 49' 01" East, 336.37 feet to the point at the place of beginning. Containing 2.48 acres.

TOGETHER WITH the right to use in common with the Landlord and others for the term of the lease as a means of access to and from the leased premises, a private road, 30 feet wide, leading from the leased premises to Doerr Street, the centerline of said 30 foot private road being more particularly located and more particularly described as follows:

BEGINNING at a point on the Southerly right of way line of Doerr Street, which point is distant the following four (4) courses and distances from a point on the Westerly right of way line of New Beaver Avenue at the dividing line between land of Duquesne Light Company and land conveyed by Urban Redevelopment Authority of Pittsburgh to Allegheny Drop Forge Company by deed dated August 1, 1974 and recorded August 2, 1974 in Deed Book Volume 5372, page 181, viz: (1) along the Westerly right of way line of New Beaver Avenue, North 28° 10' 59" West, 931.610 feet to a point of curve; (2) in a general Westerly direction by the arc of a circle curving to the left having a radius of 25 feet an arc distance of 33.080 feet to a point on the Southerly right of way line of Doerr Street (50 feet wide); (3) thence along the Southerly right of way

line of Doerr Street, South 76° 00' 15" West, 361.011 feet to an angle point; (4) thence continuing along the Southerly right of way line of Doerr Street, South 79° 17' 13" West, 58.842 feet to a point being the true point of beginning; thence from said true point of beginning by a line through land of which this is a part, said line being the centerline of the 30 foot private road, South 28° 10' 59" East, 617.285 feet to a point which point is distant North 61° 49' 01" East, 15.00 feet from the Southeast corner of the leased premises.

The above descriptions were prepared in accordance with a Plan of Survey prepared and certified by T. B. McAuliffe, Professional Engineer, dated September 14, 1976, last revised, April 12, 1977, being Drawing No. R. E. 2581-LL-7172.

MEMORANDUM OF LEASE AND SUBLEASE

MADE AND ENTERED INTO for the purpose of recording in accordance with the Act of June 2, 1959, P.L. 454 §2, 21 Purdon's Stat. Ann §405 as of the 1st day of June, 1977, by and between MELLON-STUART REALTY CO., a Pennsylvania business corporation, and DUQUESNE LIGHT COMPANY, a Pennsylvania business corporation, parties to the Lease and Sublease Agreement dated as of June 1, 1977, (hereinafter sometimes called the "Lease and Sublease"), as follows:

I. The name of the lessor in the Lease and Sublease is Mellon-Stuart Realty Co., a Pennsylvania business corporation.

II. The name of the lessee in the Lease and Sublease is Duquesne Light Company, a Pennsylvania business corporation.

III. The address of Mellon-Stuart Realty Co. is 1425 Beaver Avenue, Pittsburgh, Pennsylvania 15233; and the address of Duquesne Light Company is 435 Sixth Avenue, Pittsburgh, Pennsylvania 15219.

IV. The date of the Lease and Sublease is as of June 1, 1977.

V. The demised premises as described in the Lease and Sublease consist of a lease of the Improvements erected on and a sublease of the leasehold interest of Mellon-Stuart Realty Co. in the following property:

BEING a portion of Parcel No. 8-A and No. 8-B of the Urban Redevelopment Authority of Pittsburgh, Woods Run Redevelopment Project Penna. R-285 (part of Redevelopment Area No. 15), situate in the 27th Ward of the City of Pittsburgh, Allegheny County, Pennsylvania, more particularly bounded and described as follows:

BEGINNING at a point which point is distant the following six (6) courses and distances from a point on the Westerly right of way line of New Beaver Avenue at the dividing line between land of Duquesne Light Company and land conveyed by Urban Redevelopment Authority of Pittsburgh to Allegheny Drop Forge Company by deed dated August 1, 1974, and recorded August 2, 1974, in Deed Book Volume 5372, page 181, viz: (1) along the Westerly right of way line of New Beaver Avenue, North 28° 10' 59" West, 931.610 feet to a point of curve; (2) in a general Westerly direction by the arc of a circle curving to the left

having a radius of 25 feet an arc distance of 33.080 feet to a point on the Southerly right of way line of Doerr Street (50 feet wide); (3) thence along the Southerly right of way line of Doerr Street, South 76° 00' 15" West, 361.011 feet to an angle point; (4) thence continuing along the Southerly right of way line of Doerr Street, South 79° 17' 13" West, 58.842 feet to a point; (5) thence by a line through land of which this is a part, said line being the centerline of a private road, 30 feet in width, South 28° 10' 59" East, 280.035 feet; (6) thence by a line in said private road, South 61° 49' 01" West, 15.00 feet to a point in the Westerly line of said 30 foot private road and being the true point of beginning of the leased premises; thence from said true point of beginning by the Westerly side of said 30 foot private road, South 28° 10' 59" East, 337.25 feet to a point; thence by a line through land of which this is a part, South 61° 49' 01" West, 303.61 feet to a point on line of land of the Pittsburgh and Western Railroad; thence by line of land of said Railroad, North 33° 43' 52" West, 338.84 feet to a point; thence by a line through land of which this is a part, North 61° 49' 01" East, 336.37 feet to the point at the place of beginning. Containing 2.48 acres.

Together with the right to use in common with Duquesne Light Company and others said private road as a means of access to and from the premises to Doerr Street, the centerline of said 30 foot private road being more particularly located and more particularly described as follows:

BEGINNING at a point on the Southerly right of way line of Doerr Street, which point is distant the following four (4) courses and distances from a point on the Westerly right of way line of New Beaver Avenue at the dividing line between land of Duquesne Light Company and land conveyed by Urban Redevelopment Authority of Pittsburgh to Allegheny Drop Forge Company by deed dated August 1, 1974 and recorded August 2, 1974 in Deed Book Volume 5372, page 181, viz: (1) along the Westerly right of way line of New Beaver Avenue, North 28° 10' 59" West, 931.610 feet to a point of curve; (2) in a general Westerly direction by the arc of a circle curving to the left having a radius of 25 feet an arc distance of 33.080 feet to a point on the Southerly right of way line of Doerr Street (50 feet wide); (3) thence along the Southerly right of way line of Doerr Street, South 76° 00' 15" West, 361.011 feet to an angle point; (4) thence continuing along the Southerly right of way line of Doerr Street, South 79° 17' 13" West, 58.842 feet

to a point being the true point of beginning; thence from said true point of beginning by a line through land of which this is a part, said line being the centerline of the 30 foot private road, South 28° 10' 59" East, 617.285 feet to a point which point is distant North 61° 49' 01" East, 15.00 feet from the Southeast corner of the leased premises.

VI. The date of the commencement of the term of the Lease and Sublease is June 15, 1977.

VII. The term of the Lease and Sublease commences on June 15, 1977, and expires on December 31, 2007 unless sooner terminated in accordance with the provisions of the Lease and Sublease or otherwise by law.

VIII. The Lease and Sublease has four renewal options of five years each, the term of the last renewal term expiring December 31, 2027.

IX. Duquesne Light Company, the lessee in the Lease and Sublease, has the right to purchase the leasehold interest of the lessor and the improvements erected thereon at any time after the tenth anniversary of the Lease and Sublease.

IN WITNESS WHEREOF, the parties to the Lease and Sublease have executed this Memorandum of Lease and Sublease as of the day and year first above written.

MELLON-STUART REALTY CO.

Attest:

_____
Secretary

By _____
Vice President

[Corporate Seal]

DUQUESNE LIGHT COMPANY

Attest:

_____
Secretary

By _____

[Corporate Seal]

COMMONWEALTH OF PENNSYLVANIA)
) ss:
COUNTY OF ALLEGHENY)

On this the _____ day of June, 1977, before me a Notary Public personally appeared Tracy E. Greenholt, who acknowledged himself to be Vice President of MELLON-STUART REALTY CO., a Pennsylvania business corporation, that he, as such officer, being authorized to do so, executed the foregoing Memorandum of Lease and Sublease for the purposes therein contained by signing the name of the corporation by himself as such officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

_____
Notary Public

My Commission Expires:

COMMONWEALTH OF PENNSYLVANIA)
) ss:
COUNTY OF ALLEGHENY)

On this the _____ day of June, 1977, before me a Notary Public, personally appeared _____, who acknowledged himself to be _____ of DUQUESNE LIGHT COMPANY, that he, as such officer, being authorized to do so, executed the foregoing Memorandum of Lease and Sublease for the purposes therein contained by signing the name of the corporation by himself as such officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

_____
Notary Public

My Commission Expires:

SYSTEM CONTROL CENTER
LAND LEASE AGREEMENT

DUQUESNE LIGHT COMPANY
Landlord

MELLON-STUART REALTY CO.
Tenant

Dated: As of March 30, 1976

SYSTEM CONTROL CENTER
LAND LEASE AGREEMENT

TABLE OF CONTENTS

SYSTEM CONTROL CENTER
LAND LEASE AGREEMENT

THIS AGREEMENT made and entered into as of the 30th day of March, 1976, by and between DUQUESNE LIGHT COMPANY, a Pennsylvania business corporation (hereinafter sometimes called the "Landlord"), party of the first part;

A
N
D

MELLON-STUART REALTY CO., a Pennsylvania business corporation (hereinafter sometimes called the "Tenant"), party of the second part.

WITNESSETH:

WHEREAS, Landlord is the owner and holder of a certain piece or parcel of land situate in the 27th Ward of the City of Pittsburgh, Allegheny County, Pennsylvania, and more particularly described in Appendix A attached hereto and made a part hereof (hereinafter sometimes called the "Land");

WHEREAS, Tenant is desirous of leasing from Landlord the Land and has erected or will erect on the Land for the benefit of Landlord a System Control Center (hereinafter sometimes called the "Improvements") in accordance with plans and specifications prepared by Williams, Trebilcock and Whitehead, A.I.A., and in part by James S. Campbell, such plans and specifications being incorporated herein by reference thereto;

WHEREAS, after substantial completion of the Improvements Tenant shall lease the Improvements and shall sublease the Land to Landlord pursuant to the terms of a System Control Center Lease and Sublease Agreement in substantially the form attached hereto as Exhibit I (hereinafter, together with any modifications or amendments thereto, sometimes called the "Sublease");

NOW, THEREFORE, in consideration of the premises, Landlord and Tenant, intending to be legally bound hereby, do agree that Landlord, for and in consideration of the rents, covenants and agreements hereinafter reserved on the part of Tenant to be paid, kept and performed, does hereby demise and lease to Tenant and Tenant does hereby take and hire from Landlord the estate of Landlord in the Land and all the right, title and interest of Landlord in and to any appurtenances thereto, subject to ad valorem taxes and assessments, zoning ordinances and all matters of record, to have and hold the Land and the appurtenances, subject as aforesaid, unto Tenant for a term commencing on the 30th day of March, 1976, and expiring on the thirty-first day of December, 2027, unless this land lease agreement shall sooner terminate as hereinafter provided, upon the following covenants, agreements, terms, provisions, conditions and limitations as follows:

ARTICLE I

Construction

Section 1.01 Tenant, entirely at its own cost and expense and without charge or obligation to Landlord, in accordance with the plans, specifications, schedules and designs as hereinabove described, shall complete construction of the Improvements on the Land.

Section 1.02 During the term of this land lease agreement and thereafter if Landlord does not purchase or otherwise acquire title to the Improvements as provided in the Sublease, title to the Improvements constructed by Tenant shall be vested in Tenant and title to any change, restoration, repair, replacement, rebuilding or alteration thereof made by Tenant during the term of this land lease agreement shall vest in Tenant which shall have and own the sole depreciable interest in the Improvements and such change, restoration, repair, replacement, rebuilding or alteration thereof.

ARTICLE II

Rent

Section 2.01 Tenant covenants and agrees to pay to Landlord in such coin or currency of the United States of America as at the time of payment shall be legal tender for the payment of public and private debts, at 435 Sixth Avenue, Pittsburgh, Pennsylvania, or at such other place as Landlord may from time to time specify by notice given as hereinafter provided and to the attention of such officer or other person as Landlord may by like notice from time to time designate,

during the term hereof, a net rent (hereinafter sometimes called the "Net Rent") of One Thousand Dollars ($1,000.00) per annum.

Such Net Rent shall be payable in advance beginning on the day this land lease agreement is fully executed and delivered by Landlord and Tenant and on March 30 of each year thereafter during the term hereof.

Section 2.02 The Net Rent shall be paid to Landlord without notice or demand and without abatement, deduction or setoff, except as otherwise expressly provided in this land lease agreement.

ARTICLE III

Mechanics' Liens

Section 3.01 Tenant shall keep the Land free and clear of mechanics' liens and other liens of a similar nature which may arise in connection with the work of any character performed on the Land or the Improvements by or at the direction or sufferance of Tenant. In the case of all erection, construction, alterations or repairs involving Five Thousand Dollars ($5,000.00) or more, Tenant shall cause a no-lien agreement which shall specifically protect the interests of Landlord, Tenant and the owner of the fee to be executed by the party performing such work before any work is begun or materials delivered to the Land.

ARTICLE IV

Covenants Run With the Land

Section 4.01 All covenants, agreements and engagements contained in this land lease agreement shall be construed as covenants running with the land, and all rights given to and obligations imposed on the respective parties shall be construed as inuring to and binding upon the successors in interest and assigns of the parties hereof, respectively.

ARTICLE V

Defaults and Remedies

Section 5.01 The occurrence of any one or more of the following events shall constitute a default or breach of this land lease agreement by Tenant if the same shall continue for thirty (30) days following notice thereof from Landlord to Tenant:

(a) The failure of Tenant to pay, when due, all or any part of the Net Rent.

(b) The failure of Tenant to observe or perform any of the other covenants, conditions or agreements of this land lease agreement to be kept, observed or performed by Tenant upon the expiration of any period specifically allowed therefor in this land lease agreement; provided, however, that Tenant shall have deemed to have complied with such notice

as long as it has commenced to comply with such notice within the period set forth therein and is diligently attempting to comply with such notice.

(c) The making by Tenant of any assignment for the benefit of creditors, the adjudication that Tenant is bankrupt or insolvent, the filing by or against Tenant of a petition to have Tenant adjudged a bankrupt or a petition for reorganization or arrangement under any law relating to bankruptcy (unless, in the case of a petition filed against Tenant, the same is dismissed within sixty (60) days after the filing thereof), the appointment of a trustee or receiver to take possession of substantially all of Tenant's assets located on the Land or in the Improvements, or of Tenant's interest in this land lease agreement (unless possession is restored to Tenant within sixty (60) days after such appointment), or the attachment, execution or levy against, or other judicial seizure of, substantially all of Tenant's assets located in or upon the Land or the Improvements or of Tenant's interest in this land lease agreement (unless the same is discharged within sixty (60) days after issuance thereof).

Section 5.02 . In the event of any default or breach of this land lease agreement by Tenant there shall become im-

mediately due and payable as rent under this land lease agreement, as if by the terms thereof same were all payable in advance, a sum equal to the Net Rent for all calendar years and fractions thereof remaining in the balance of the term of this land lease agreement as of the date of default. Tenant shall be obligated for such accelerated rent regardless of which, if any, of the remedies provided in Section 5.03 hereof or provided by law or equity Landlord shall elect to pursue.

Section 5.03

(a) In the event of any default or breach of this land lease agreement by Tenant, Landlord, at its option, may terminate this land lease agreement upon and by giving written notice of termination to Tenant, or Landlord without terminating this land lease agreement may at any time after such default or breach, without notice or demand additional to that provided in Section 5.01 hereof, enter the Land and the Improvements, with or without process of law, and without thereby incurring any liability to Tenant, take possession of the Land and the Improvements and of all personal property, of every kind, on the Land and the Improvements. Landlord may thereupon at any time, and from time to time, (a) collect the rent and profits which may otherwise accrue to Tenant from the use, enjoyment and operation of the Land and the Improvements or (b) relet the Land and the Improvements, or any part thereof, for the account of Tenant for such term, upon such condition

and at such rents as Landlord may deem proper. All rents so collected by Landlord shall first be applied against such expenses as Landlord may have incurred in taking or recovering possession of the Land and the Improvements, taking the same in good order and condition, altering or repairing same for any reletting and such other expenses, commissions and charges, including attorney's fees, as Landlord may have paid or incurred in connection with any of the foregoing, and the balance shall be applied against such accelerated rents. Any tenants making such payment to Landlord shall be under no obligation to see to the application by Landlord of such rents nor shall Tenant have any right to collect any rents after such default for so long as the same shall continue. Tenant hereby waives the benefits of any statutes now in force or hereafter enacted exempting any property of any kind or value from levy and sale for rent.

(b) All remedies provided in this land lease agreement shall be taken and construed as cumulative, that is, in addition to every other remedy provided in this land lease agreement or by law or equity.

ARTICLE VI

Waiver

Section 6.01 Except to the extent that Landlord may have otherwise agreed in writing, no waiver by Landlord of any breach by Tenant of any of its obligations, agreements or cove-

nants hereunder shall be deemed to be a waiver of any subsequent breach of the same or any other covenants, agreements or obligations, nor shall any forebearance by Landlord to seek a remedy for any breach be deemed a waiver by Landlord of its rights or remedies with respect to such breach.

ARTICLE VII

Estoppel Certificates

Section 7.01 Each party agrees that at any time and from time to time, within twenty (20) days following written request from the other party, the party so requested shall execute and deliver to the other party a statement certifying that this land lease agreement is in full force and effect and unmodified (or if there have been modifications, stating such), certifying the dates to which the Net Rent has been paid; and certifying whether or not, to the best of the knowledge of the party signing such certificate, the other party has failed or refused to perform any obligation contained in this land lease agreement, and if so, specifying the same.

Section 7.02 The failure of either party to furnish such statement within such twenty (20) day period shall be deemed to be an acknowledgement, by the party requested to give such statement, to any person entitled to rely thereon, that this land lease agreement is in full force and effect and is unmodified, that such Net Rent has been duly and fully paid to and including the respective due date immediately preceding the date

of such request, and that the party requesting such statement has performed all obligations contained in this land lease agreement to the date of such request.

ARTICLE VIII

Termination

Section 8.01 Either party shall have the right to terminate this land lease agreement upon the expiration or termination for any cause of the Sublease upon sixty (60) days written notice to the other following the date of expiration or termination of the Sublease and the Net Rent provided to be paid by Tenant shall be apportioned and paid to the date of such termination. In the event of any such termination, Tenant hereby grants to Landlord the option to sell the Land to Tenant for a purchase price payable in cash equal to Landlord's original cost for the Land. Such option to sell shall be exercised by Landlord by written notice to Tenant within the period of such notice of termination of this land lease agreement and such purchase and sale contemplated thereby shall take place on the date of such termination.

Section 8.02 At the termination of this land lease agreement for any cause, without the purchase by Tenant of the Land pursuant to Section 8.01 hereof, Tenant and the tenants and subtenants under Tenant, and any and all persons holding or claiming under Tenant, shall surrender possession of the Land and the Improvements to Landlord, and free of any and all claim thereto by Tenant or any party holding under Tenant.

Section 8.03 At the termination of this land lease agreement for any cause, without the purchase by Tenant of the Land pursuant to Section 8.01 hereof, and provided Tenant is not then in default hereunder, Tenant and the tenants and subtenants under Tenant and any and all persons holding or claiming under Tenant shall have the right to remove from the Land and the Improvements, at its or their own expense, all their business fixtures, machinery and equipment and other property; provided, however, that Tenant or the persons so removing such property shall repair any damage to the Land and Improvements by the removal thereof.

ARTICLE IX

Invalidity of Particular Provisions

Section 9.01 If any term or provision of this land lease agreement or the application thereof to any person or circumstance shall, to any extent, be invalid or unenforceable, the remainder of this land lease agreement, or the application

of such term or provision to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected thereby, and each term and provision of this land lease agreement shall be valid and be enforced to the fullest extent permitted by law.

ARTICLE X

Notices

Section 10.01 All notices, demands and requests required under this land lease agreement shall be in writing. All such notices, demands and requests shall be deemed to have been properly given if served personally, or if sent by United States registered mail, postage prepaid, addressed as hereinafter provided. All such notices, demands and requests mailed to Landlord shall be addressed to Landlord at 435 Sixth Avenue, Pittsburgh, Pennsylvania 15219, or at such other address (and addressed to the attention of such officer or other person) as Landlord may from time to time designate by written notice to Tenant. All such notices, demands and requests mailed to Tenant shall be addressed to Tenant at 1425 Beaver Avenue, Pittsburgh, Pennsylvania 15233, or at such other address (and addressed to the attention of such officer or other person) as Tenant may from time to time designate by written notice to Landlord.

Section 10.02 Notices, demands and requests which shall be served by registered mail upon Landlord and Tenant in the manner aforesaid shall be deemed sufficiently served or given for all purposes hereunder at the time such notice, demand

or request shall be mailed by United States registered mail as aforesaid in any post office or branch post office regularly maintained by the United States Postal Service.

ARTICLE XI

Condition of and Title to Property Quiet Enjoyment

Section 11.01 Landlord covenants and agrees that Tenant, upon payment of the Net Rent and observing and keeping all covenants, agreements and conditions of this land lease agreement on its part to be observed and kept, shall quietly have and enjoy the Land and the Improvements during the term hereof without hindrance or molestation by anyone claiming by or through Landlord, subject, however, to the exceptions, reservations and conditions contained herein.

ARTICLE XII

Disposition Contract

12.01 This land lease agreement is subject to the terms and conditions as set forth in the Disposition Contract between the Urban Redevelopment Authority of Pittsburgh and Landlord dated March 30, 1976, which is incorporated herein by reference thereto, and if there is any conflict in the terms and conditions of this land lease agreement and said contract, then the terms and conditions of the Disposition Contract shall control.

ARTICLE XIII

Miscellaneous

Section 13.01 Immediately following the execution and delivery of this land lease agreement, Landlord and Tenant shall execute, acknowledge and deliver the memorandum of lease in the form set forth in Exhibit II attached hereto and made a part hereof and shall cause the same to be recorded, at the cost of Tenant, in the office of the Recorder of Deeds of Allegheny County, Pennsylvania.

Section 13.02 The captions of this land lease agreement and the table of contents preceding this land lease agreement are for convenience and reference only and in no way define, limit or describe the scope or intent hereof.

Section 13.03 This land lease shall be construed and enforced in accordance with the laws of the Commonwealth of Pennsylvania.

Section 13.04 It is the purpose and intent of Landlord and Tenant that this land lease agreement together with the Sublease shall set forth the rights given to and the obligations imposed upon the respective parties thereto with respect to the Land and the Improvements during the term of this land lease agreement and the Sublease, including without limitation the obligations of the parties with respect to taxes, assessments, utility charges, insurance, repair, maintenance, damage by fire or other casualty and condemnation.

Section 13.05 Tenant will not, without the prior written consent of Landlord, which consent shall not be unreasonably withheld, sublet all or a portion of the Land, assign its rights under this land lease agreement or mortgage the leasehold estate created hereby.

Section 13.06 The covenants and agreements herein contained shall bind and inure to the benefit of Landlord, its successors and assigns, and Tenant and its successors and assigns, except as otherwise provided herein.

IN WITNESS WHEREOF, Landlord and Tenant have duly executed this land lease agreement the day and year first above written.

RSC
6-15-77

DUQUESNE LIGHT COMPANY

Attest:

Secretary

By _____
John W. Arthur
CHAIRMAN OF THE BOARD
AND CHIEF EXECUTIVE OFFICER

[Corporate Seal]

MELLON-STUART REALTY CO.

Attest:

Secretary

By _____
Vice President

[Corporate Seal]

PROPERTY DESCRIPTION

BEING a portion of Parcel No. 8-A and No. 8-B of the Urban Redevelopment Authority of Pittsburgh, Woods Run Redevelopment Project Penna. R-285 (part of Redevelopment Area No. 15), situate in the 27th Ward of the City of Pittsburgh, Allegheny County, Pennsylvania, more particularly bounded and described as follows:

BEGINNING at a point which point is distant the following six (6) courses and distances from a point on the Westerly right of way line of New Beaver Avenue at the dividing line between land of Duquesne Light Company and land conveyed by Urban Redevelopment Authority of Pittsburgh to Allegheny Drop Forge Company by deed dated August 1, 1974, and recorded August 2, 1974, in Deed Book Volume 5372, page 181, viz: (1) along the Westerly right of way line of New Beaver Avenue, North 28° 10' 59" West, 931.610 feet to a point of curve; (2) in a general Westerly direction by the arc of a circle curving to the left having a radius of 25 feet an arc distance of 33.080 feet to a point on the Southerly right of way line of Doerr Street (50 feet wide); (3) thence along the Southerly right of way line of Doerr Street, South 76° 00' 15" West, 361.011 feet to an angle point; (4) thence continuing along the Southerly right of way line of Doerr Street, South 79° 17' 13" West, 58.842 feet to a point; (5) thence by a line through land of which this is a part, said line being the centerline of a private road, 30 feet in width, South 28° 10' 59" East, 280.035 feet; (6) thence by a line in said private road, South 61°49' 01" West, 15.00 feet to a point in the Westerly line of said 30 foot private road and being the true point of beginning of the

leased premises; thence from said true point of beginning by the Westerly side of said 30 foot private road, South 28° 10' 59" East, 337.25 feet to a point; thence by a line through land of which this is a part, South 61° 49' 01" West, 303.61 feet to a point on line of land of the Pittsburgh and Western Railroad; thence by line of land of said Railroad, North 33° 43' 52" West, 338.84 feet to a point; thence by a line through land of which this is a part, North 61° 49' 01" East, 336.37 feet to the point at the place of beginning. Containing 2.48 acres.

TOGETHER WITH the right to use in common with the Landlord and others for the term of the lease as a means of access to and from the leased premises, a private road, 30 feet wide, leading from the leased premises to Doerr Street, the centerline of said 30 foot private road being more particularly located and more particularly described as follows:

BEGINNING at a point on the Southerly right of way line of Doerr Street, which point is distant the following four (4) courses and distances from a point on the Westerly right of way line of New Beaver Avenue at the dividing line between land of Duquesne Light Company and land conveyed by Urban Redevelopment Authority of Pittsburgh to Allegheny Drop Forge Company by deed dated August 1, 1974 and recorded August 2, 1974 in Deed Book Volume 5372, page 181, viz: (1) along the Westerly right of way line of New Beaver Avenue, North 28° 10' 59" West, 931.610 feet to a point of curve; (2) in a general Westerly direction by the arc of a circle curving to the left having a radius of 25 feet an arc distance of 33.080 feet to a point on the Southerly right of way line of Doerr Street (50 feet wide); (3) thence along the Southerly right of way

line of Doerr Street, South 76° 00' 15" West, 361.011 feet to an angle point; (4) thence continuing along the Southerly right of way line of Doerr Street, South 79° 17' 13" West, 58.842 feet to a point being the true point of beginning; thence from said true point of beginning by a line through land of which this is a part, said line being the centerline of the 30 foot private road, South 28° 10' 59" East, 617.285 feet to a point which point is distant North 61° 49' 01" East, 15.00 feet from the Southeast corner of the leased premises.

The above descriptions were prepared in accordance with a Plan of Survey prepared and certified by T. B. McAuliffe, Professional Engineer, dated September 14, 1976, last revised, April 12, 1977, being Drawing No. R. E. 2581-LL-7172.

SYSTEM CONTROL CENTER LEASE AND SUBLEASE AGREEMENT

MELLON-STUART REALTY CO.
Landlord

DUQUESNE LIGHT COMPANY
Tenant

Dated as of June 1, 1977

Exhibit 1

SYSTEM CONTROL CENTER LEASE
AND SUBLEASE AGREEMENT

TABLE OF CONTENTS

SYSTEM CONTROL CENTER LEASE AND SUBLEASE AGREEMENT

THIS AGREEMENT made and entered into as of the 1st day of June, 1977, by and between MELLON-STUART REALTY CO., a Pennsylvania business corporation (hereinafter sometimes called the "Landlord"), party of the first part;

A
N
D

DUQUESNE LIGHT COMPANY, a Pennsylvania business corporation (hereinafter sometimes called the "Tenant"), party of the second part.

WITNESSETH:

WHEREAS, by Land Lease Agreement dated as of March 30, 1976 (hereinafter, together with any amendments or modifications, sometimes called the "Land Lease"), Landlord has leased from Tenant, a certain piece or parcel of land situate in the 27th Ward of the City of Pittsburgh, Allegheny County, Pennsylvania, and more particularly described in Appendix A attached hereto and made a part hereof (hereinafter sometimes called the "Land");

WHEREAS, Landlord has erected on the Land certain improvements for Tenant consisting of a System Control Center (hereinafter sometimes called the "Improvements") in accordance with drawings and specifications prepared by Williams, Trebilcock and Whitehead, A.I.A., and in part by James S. Campbell, such plans and specifications being incorporated herein by reference thereto,

WHEREAS, Tenant is desirous of subleasing from Landlord the Land and of leasing from Landlord the Improvements and Landlord is willing to sublease and lease the same to Tenant upon the terms and conditions hereinafter set forth;

NOW, THEREFORE, in consideration of the premises, Landlord and Tenant, intending to be legally bound hereby, do agree that Landlord, for and in consideration of the rents, covenants and agreements hereinafter reserved on the part of Tenant to be paid, kept and performed, does hereby demise and lease to Tenant and Tenant does hereby take and hire from Landlord (a) the Improvements, (b) the leasehold estate of the Landlord in the Land, and (c) all the right, title and interest of Landlord in and to any appurtenances thereto, subject to the terms and provisions of the Land Lease and that certain mortgage dated June 15, 1977 (hereinafter sometimes called the "Mortgage"), securing a promissory note in the principal amount of $3,900,000 from Landlord to The Western Saving Fund Society of Philadelphia, ad valorem taxes and assessments, zoning ordinances and all matters of record, to have and to hold the Improvements, such leasehold estate and appurtenances, subject as aforesaid, unto Tenant for a term commencing on June 15, 1977, and expiring on the thirty-first day of December, 2007, unless this agreement shall sooner terminate as hereinafter provided, or shall be renewed as hereinafter provided, upon the following covenants, agreements, terms, provisions, conditions and limitations as follows:

ARTICLE I

Constructing the Improvements
and Installation of Equipment

Section 1.01 Landlord, entirely at its own cost and expense and without charge or obligation to Tenant, in accordance with the plans, specifications, schedules and designs of Williams, Trebilcock and Whitehead and James S. Campbell as hereinbefore described, shall complete construction of the Improvements on the Land.

Section 1.02 Tenant, entirely at its own cost and expense and without charge or obligation to Landlord, shall provide and install all machinery and equipment deemed by Tenant to be necessary for the operation of the Improvements as a System Control Center.

Section 1.03 Title to the Improvements shall at all times during the term of this agreement be vested in Landlord and title to any change, restoration, repair, replacement, rebuilding or alteration thereof during the term made by Landlord shall vest in Landlord which shall have and own the sole depreciable interest in the Improvements, and such change, restoration, repair, replacement, rebuilding or alteration thereof.

ARTICLE II

Rent

Section 2.01 Tenant covenants and agrees to pay to Landlord in such coin or currency of the United States of America as at the time of

payment shall be legal tender for the payment of public and private debts, at the principal office of Landlord, 1425 Beaver Avenue, Pittsburgh, Pennsylvania 15233, or at such other place as Landlord may from time to time specify by notice given pursuant to Section 18.01 hereof, and to the attention of such officer or other person as Landlord may by like notice from time to time designate, during the term, net rent (hereinafter sometimes called the "Net Rent") of Four Hundred Twenty-eight Thousand Dollars ($428,000) per annum.

Such Net Rent shall be in addition to all other payments to be made by Tenant as hereinafter provided and shall be paid in equal monthly installments of Thirty-five Thousand Six Hundred Sixty-six and Sixty seven One-Hundredth Dollars ($35,666.67), each on the first day of each calendar month during the term of this agreement commencing on August 1, 1977.

Section 2.02 The Net Rent shall be paid to Landlord without notice or demand and without abatement, deduction or setoff.

ARTICLE III

Use of Premises, Repair and Maintenance

Section 3.01 The Land and the Improvements shall be used only for the operation of a System Control Center by Tenant and for no other purpose without the express written consent of Landlord. Tenant shall conform with all applicable statutes, ordinances, rules and regulations, and shall defend, indemnify and hold Landlord harmless from all expenses, liabilities or claims of liability by reason of any violations thereof.

Section 3.02 Tenant, at its sole cost and expense, shall keep and maintain the Land and the Improvements and all appurtenances thereto, and the parking areas, roadways, sidewalks and other passageways, to the extent they are subject to the control of Tenant and each and every part thereof, in good order and repair and in an attractive, safe and sanitary condition.

Section 3.03 Tenant, at its sole cost and expense, may make such alterations, improvements, additions and new construction, structural or otherwise, in and to the Land and the Improvements and may erect or install in connection therewith additional structures, improvements, fixtures, machinery and equipment; provided, however, that any such alterations, improvements, additions and construction shall not change the general character of the Land and the Improvements or adversely affect their market value. Any fixtures, equipment, machinery and other property erected or installed on the Land and the Improvements and used in the operation of the Tenant's business shall remain the property of the Tenant.

Section 3.04 Except in connection with its obligations to erect the Improvements, Landlord shall not be required to furnish any services or facilities or to make any repair or alterations in or to the Land or the Improvements throughout the term of this agreement.

ARTICLE IV

Mechanics' Liens

Section 4.01 Tenant shall keep the Land and the Improvements free and clear of mechanics' liens and other liens of a similar nature which

may arise in connection with the work of any character performed on the Land or the Improvements by or at the direction or sufferance of Tenant, other than in connection with the erection of the Improvements. In the case of all erection, construction, alterations or repairs involving Five Thousand Dollars ($5,000.00) or more, Tenant shall cause a no-lien agreement which shall specifically protect the interests of Landlord, Tenant and the owner of the fee of the Land to be executed by the party performing such work before any work is begun or materials delivered to the Land. If, despite such no-lien agreement, or in the case of construction involving less than Five Thousand Dollars ($5,000.00), one or more mechanics' liens are filed against the interest of Landlord, Tenant or such owner of the Land, Tenant shall notify Landlord thereof promptly and either pay the amount claimed or otherwise obtain the discharge of such lien promptly. On final determination of the lien or claim for lien, Tenant shall immediately pay any judgment rendered with all proper costs and charges and shall have the judgment satisfied and lien released of record at Tenant's expense. If any such lien shall be placed on the Land or the Improvements and the same ripen into a judgment which becomes final, Landlord, at its option, may pay any such final judgment and clear the Land or the Improvements and any monies so expended by Landlord on account of any such judgment from its own funds shall be repaid by Tenant to Landlord forthwith upon demand, and in every such instance the legality and validity of any such payment to the full amount paid or expended by Landlord and the regularity of all proceedings had in respect thereof or toward the enforcement thereof shall, as between Landlord and Tenant, be conclusively deemed to exist.

ARTICLE V

Taxes and Assessments and Utility Charges; Interruption of Utility Services

Section 5.01 Tenant shall reimburse Landlord for all taxes, assessments and levies paid by Landlord, whether general or special, ordinary or extraordinary, of every nature or kind whatsoever, whether imposed by the Commonwealth of Pennsylvania or any political subdivision thereof, upon or against this agreement or all or any part of the Improvements or the occupancy, use or possession thereof; provided, however, that any such amounts for the first and last year of the term hereof shall be prorated between the parties. Tenant shall promptly reimburse Landlord for such amount immediately following demand by Landlord. The responsibility for the payment of all taxes, assessments and levies upon or against all or any part of the Land, or the occupancy, use or possession thereof shall be that of the owner of the fee of the Land.

Section 5.02 Nothing herein contained shall be construed to require Tenant to pay any transfer, estate, inheritance, succession, or gift tax or taxes imposed in respect of any devise or gift of any interest of Landlord or of its successors or assigns in the Land or the Improvements, nor any income tax imposed in respect to Landlord's income from the Land or the Improvements.

Section 5.03 Tenant shall have the right to contest in the name of Landlord the legality or validity of any of the taxes, assessments or levies herein provided to be reimbursed to Landlord. In the event that any such contest is made by Tenant, Landlord shall cooperate with Tenant therein by promptly executing all required documents and taking such other actions as are reasonably required to enable Tenant to prosecute such contest. Tenant shall, within five (5) days after final determination of such contest adversely to Tenant, fully reimburse Landlord for any amount involved in or affected by any such contest, together with all penalties, fines, interests, costs or expenses that may have accrued thereon or that may result from any such action by Tenant.

Section 5.04 If permitted under the laws and regulations relating thereto, the Land shall be assessed for the purposes of taxation in the name of the owner of the fee and the Improvements shall be assessed in the name of Landlord.

Section 5.05 Landlord shall promptly deliver to the owner of the fee any and all tax notices or assessments which it may receive relating to the Land and Tenant shall deliver to Landlord any such notice or assessments which it may receive relating to the Improvements.

Section 5.06 Tenant shall pay directly to the public utility companies or governmental bodies or authorities all charges for utilities in connection with its use or occupancy of the Land or the Improvements and shall indemnify Landlord against liability therefor. If any such charges are not paid when due, Landlord may at its option pay same, and any amounts so paid by Landlord shall be paid by Tenant to Landlord immediately upon demand therefor. Tenant shall show to Landlord upon request receipts for utility charges paid by Tenant.

Section 5.07 Landlord shall not be liable to Tenant or to anyone claiming under, by or through Tenant for the quality or quantity, or for any failure or interruption, of any utility service being furnished to Tenant by a public utility company or governmental body or authority, and no such failure or interruption shall be breach of this agreement or otherwise entitle Tenant to terminate this agreement.

ARTICLE VI

Public Liability and
Property Damage

Section 6.01 Tenant shall protect, indemnify and save harmless Landlord from and against any and all losses, damages, costs, expenses, liabilities, claims, demands and causes of action of any nature whatsoever, and any expenses incidental to the defense thereof by Landlord for injury to or death of persons or loss or damage to property occurring on the Land or the Improvements or in any manner directly or indirectly growing out of or in connection with the use and occupancy or disuse of the Land or the Improvements or any part thereof by Tenant or any person or persons invited, suffered or permitted by Tenant to go or to be in or upon the Land or the Improvements.

Section 6.02 As security for the foregoing but in no wise as a limitation thereupon, Tenant shall, at its sole cost and expense, procure and keep in effect during the term or terms of this agreement the following insurance policies with insurance companies satisfactory to Landlord:

(a) Comprehensive general public liability insurance against any and all claims or demands whatsoever arising out of or in any way connected with the operation and use of the Land and the Improvements by Tenant with minimum limits of Five Hundred Thousand Dollars ($500,000.00) for injury or death of one person in each accident or occurrence and One Million Dollars ($1,000,000.00) for injury to or death of more than one person in each accident or occurrence and Two Hundred Fifty Thousand Dollars ($250,000.00) for property damage in each accident or occurrence.

(b) Workmen's compensation insurance and any other insurance as shall be required by any statute, ordinance, rule or regulation of any governmental body in connection with the operation and use of the Land or the Improvements by Tenant.

(c) Any other insurance which Landlord shall reasonably require to protect itself against any liability assumed by Tenant under this agreement or in connection with the use and occupancy by Tenant of the Land or the Improvements.

(d) Landlord and the owner of the fee of the Land shall be named as additional insureds on all such insurance policies without cost or expense to Landlord or such owner and copies or certificates of all such policies shall be delivered to Landlord. Such policies shall further require that at least ten (10) days' notice of cancellation be sent to Landlord and the owner of the fee.

(e) If Tenant shall fail to obtain or maintain any such insurance, Landlord may, at its option, obtain or maintain any such insurance and Tenant shall reimburse Landlord for the cost thereof immediately upon demand therefor.

(f) Notwithstanding the foregoing, Tenant may be a self-insurer to such extent as Tenant may reasonably desire, subject to any insurance requirements of the Mortgage.

ARTICLE VII

Fire Insurance

Section 7.01 Tenant, at its sole cost and expense, will keep the Improvements insured against loss by fire in an amount sufficient to prevent Landlord or Tenant from becoming co-insurers of any loss, subject to any applicable deductible. Such insurance shall be carried with responsible insurance companies and in amounts reasonably acceptable to Landlord and the holder of the Mortgage. Subject to the rights of the holder of the Mortgage, the policies evidencing such insurance shall be so issued as to cover the several interests of Landlord and Tenant and shall provide that in case of loss or damage the proceeds of such insurance shall be payable to Tenant. Such proceeds shall be held by Tenant under the provisions of Section 8.02 hereof.

Section 7.02 The policy or policies evidencing all insurance which Tenant is required to provide and maintain in effect hereunder shall be delivered to Landlord from time to time as issued, except that certificates of insurance may be substituted for such policy or policies, and if Tenant shall fail to provide, maintain or pay for any of the insurance hereinabove provided for, Landlord may, at its option, procure such insurance. Any sums paid out by Landlord for any such insurance shall be repaid by Tenant to Landlord immediately upon demand therefor.

ARTICLE VIII

Damage or Destruction

Section 8.01 In the event of any fire or other casualty to the Improvements resulting in substantial damage or destruction to the Improvements, Tenant shall have the option of (a) restoring, repairing, rebuilding or altering

the Improvements, or (b) terminating this agreement by written notice to Landlord within ninety (90) days of such damage or destruction. Upon the termination of this agreement by reason of such damage or destruction, the Net Rent provided to be paid by Tenant shall be apportioned and paid to the date of such termination. In the absence of such termination by Tenant no damage or destruction of the Improvements or any part thereof by fire or other casualty shall terminate or permit Tenant to surrender this agreement, or shall release Tenant from its liability to pay the full Net Rent and other amounts payable hereunder, and Tenant waives any rights now or hereafter conferred upon it by statute or otherwise to quit or surrender this agreement or the Land or any part hereof, or to any suspension, diminution, abatement or reduction of rent on account of any such destruction or damage.

Section 8.02 In the event of the termination of this agreement by reason of the damage to or destruction of the Improvements or any part thereof by fire or other casualty as provided in Section 8.01 hereof, Tenant shall be entitled to all the proceeds, if any, of casualty insurance with respect to the Improvements and Tenant shall pay to the holder of the Mortgage the amount then required to pay in full and discharge the Mortgage. In such event, Landlord by appropriate instrument of assignment shall convey, assign and transfer and set over unto Tenant good, marketable and unencumbered title to the interests of the Landlord in the Land and the Improvements. In the absence of termination of this agreement in the event of such fire or other casualty, the Tenant shall be entitled to all the proceeds of such casualty insurance.

ARTICLE IX

Condemnation

Section 9.01 In the event that all or substantially all the Land and Improvements shall be taken in condemnation proceedings or by exercise of any right of eminent domain or by agreement between Landlord and Tenant, and those authorized to exercise such right, this agreement shall terminate and expire on the date of such taking and the Net Rent provided to be paid by Tenant shall be apportioned and paid to the date of such taking. For the purposes of this Section "substantially all the Land and Improvements" shall be deemed to have been taken if the portion of the Land and Improvements not so taken, and taking into consideration the amount of the net award available for such purpose, the Improvements cannot be so repaired or reconstructed as to constitute a complete structure capable of being operated, practically and economically by Tenant for a System Control Center. In such event, Tenant and the owner of the fee shall be entitled to collect from any condemnor the entire award that may be made in any such proceeding and Tenant and such owner of the fee shall pay to the holder of the Mortgage the amount then required to pay in full and discharge the Mortgage. Landlord shall execute any and all further documents that may be required in order to facilitate collection by Tenant of any and all such award and by appropriate instrument of assignment shall convey, assign, transfer and set over unto Tenant good, marketable and unencumbered title to the interest of the Landlord in the Land and the Improvements.

Section 9.02 If at any time during the term of this agreement, less than substantially all the Land and Improvements shall be taken as aforesaid, out

of the award or awards collected, there shall be first set aside for the owner of the fee the fair market value as determined in said proceeding of the Land so taken, with the Tenant entitled to any balance. In such event, Tenant shall continue to pay in full the Net Rent and other amounts payable hereunder without reduction or abatement and no such taking shall terminate or permit the Tenant to surrender this agreement.

ARTICLE X

Covenants Run
With the Land

Section 10.01 All covenants, agreements and engagements contained in this agreement shall be construed as covenants running with the land, and all rights given to and obligations imposed on the respective parties shall be construed as inuring to and binding upon the successors in interest and assigns of the parties hereto.

ARTICLE XI

Defaults and Remedies

Section 11.01 The occurrence of any one or more of the following events shall constitute a default or breach of this agreement by Tenant if the same shall continue for thirty (30) days following notice thereof from Landlord to Tenant:

(a) The failure of Tenant to pay, when due, all or any part of the Net Rent or other sums payable hereunder.

(b) The failure of Tenant to observe or perform any of the other covenants, conditions or agreements of this agreement to be kept, observed or performed by Tenant upon the expiration of any period specifically allowed therefor in this agreement, provided,

however, that Tenant shall have deemed to have complied with such notice so long as it has commenced to comply with such notice within the period set forth therein and is diligently attempting to comply with such notice.

(c) The making by Tenant of any assignment for the benefit of creditors, the adjudication that Tenant is bankrupt or insolvent, the filing by or against Tenant of a petition to have Tenant adjudged a bankrupt or a petition for reorganization or arrangement under any law relating to bankruptcy (unless, in the case of a petition filed against Tenant, the same is dismissed within sixty (60) days after the filing thereof), the appointment of a trustee or receiver to take possession of substantially all of Tenant's assets located on the Land or in the Improvements, or of Tenant's interest in this agreement (unless possession is restored to Tenant within sixty (60) days after such appointment), or the attachment, execution or levy against, or other judicial seizure of, substantially all of Tenant's assets located in or upon the Land or the Improvements or of Tenant's interest in this agreement (unless the same is discharged within sixty (60) days after issuance thereof).

Section 11.02 In the event of any default or breach of this agreement by Tenant there shall become immediately due and payable as rent under this agreement, as if by the terms hereof same were all payable in advance, a sum equal to all Net Rent for all calendar years and fractions thereof remaining in the balance of the term of this agreement

as of the date of default. Tenant shall be obligated for such accelerated rent regardless of which, if any, of the remedies provided in Section 11.03 hereof or provided by law or equity Landlord shall elect to pursue.

Section 11.03 In the event of any default or breach of this agreement by Tenant, Landlord, at its option, may terminate this agreement upon and by giving written notice of termination to Tenant, or Landlord without terminating this agreement may at any time after such default or breach, without notice or demand additional to that provided in Section 11.01 hereof, enter the Land and the Improvements, with or without process of law and, without thereby incurring any liability to Tenant, take possession of the Land and the Improvements and of all personal property of every kind on the Land and the Improvements. Landlord may thereupon at any time, and from time to time, (i) collect the rent and profits which may otherwise accrue to Tenant from the use, enjoyment and operation of the Land and the Improvements, or (ii) relet the Land and the Improvements, or any part thereof, for the account of Tenant for such term, upon such condition and at such rents as Landlord may deem proper. All rents so collected by Landlord shall first be applied against such expenses as Landlord may have incurred in taking or recovering possession of the Land and the Improvements, taking the same in good order and condition, altering or repairing same for any reletting and such other expenses, commissions and charges including attorney's fees as Landlord may have paid or incurred in connection with any of the foregoing, and the balance shall be applied against such accelerated rents. Any tenants making such payment to Landlord shall be under no obligation to see to the application by Landlord of such rents nor shall Tenant have any right to collect any rents after such default for so long as the same shall continue. Tenant hereby waives the benefits of any statutes now in force or hereafter enacted exempting any property of any kind or value from levy and sale for rent.

11.04 All remedies provided in this agreement shall be taken and construed as cumulative, that is, in addition to every other remedy provided in this agreement or by law or equity. For purposes of the remedies of the Landlord, any sums payable by the Tenant in addition to the Net Rent shall be deemed additional rent hereunder.

ARTICLE XII

Options to Renew

12.01 If this agreement shall be in force and effect on the date hereof specified for the expiration of the original term, Tenant shall be entitled to a renewal of the term hereby granted for four additional renewal terms of five (5) years each, the first renewal term beginning with the expiration of the original term and the second, third and fourth renewal terms beginning with the expiration of the preceding renewal term; provided that Tenant shall have given Landlord at least one (1) year notice of such election to renew, but in no event more than two (2) years prior to the date of the expiration of the original term in the case of the first renewal or more than two (2) years prior to the expiration of the preceding renewal term in the case of the second, third and fourth renewal terms. Each renewal term shall be upon the same terms and conditions as those contained herein with respect to the original term.

ARTICLE XIII

Option to Purchase

Section 13.01 Landlord hereby grants to Tenant the option to purchase good, marketable and unencumbered title to (a) the leasehold interest of

Landlord in the Land and (b) the Improvements for a purchase price payable in cash and the assumption by Tenant of, and the release of Landlord from, all obligations of Landlord under the Land Lease. Tenant may exercise such option by giving written notice to Landlord at any time during the term of this agreement following the tenth anniversary of the date hereof and the sale and purchase contemplated hereby shall take place within thirty (30) days after the expiration of the lease year in which the option is exercised.

Section 13.02 The purchase price provided in Section 13.01 shall be the fair market value of the Improvements in their then condition as determined by a board of three real estate appraisers, each of which shall be members of the American Institute of Real Estate Appraisers or the American Society of Appraisers and shall have had at least ten years' experience in commercial real estate appraisal. One each of such appraisers shall be appointed by the Landlord and Tenant and the two so appointed shall appoint the third appraiser. All costs and expenses of such appraisers, together with any costs, taxes and recording fees applicable to the transfer of the leasehold interest of Landlord and the Improvements to Tenant shall be paid by Tenant. For purpose of this Section, fair market value shall mean the price at which such property in its then condition unencumbered by this agreement and the Mortgage would change hands between a willing buyer and a willing seller when the former is not under any compulsion to buy and the latter is not under any compulsion to sell. Notwithstanding the foregoing, in no event shall said purchase price be less than the amount then required to pay in full and discharge the Mortgage.

ARTICLE XIV

Waiver

Section 14.01 Except to the extent that Landlord may have otherwise agreed in writing, no waiver by Landlord of any breach by Tenant of any of its obligations, agreements or covenants hereunder shall be deemed to be a waiver of any subsequent breach of the same or any other covenants, agreements or obligations, nor shall any forbearance by Landlord to seek a remedy for any breach be deemed a waiver by Landlord of its rights or remedies with respect to such breach.

ARTICLE XV

Estoppel Certificates

Section 15.01 Each party agrees that at any time and from time to time, within twenty (20) days following written request from the other party, the party so requested shall execute and deliver to the other party a statement certifying that this agreement is in full force and effect and unmodified (or if there have been modifications, stating such), certifying the dates to which the Net Rent has been paid; and certifying whether or not, to the best of the knowledge of the party signing such certificate, the other party has failed or refused to perform any obligation contained, in this agreement, and if so, specifying the same.

Section 15.02 The failure of either party to furnish such statement within such twenty (20) day period shall be deemed to be an acknowledgment, by the party requested to give such statement, to any person entitled to rely thereon, that this agreement is in full force and effect and is unmodified, that such Net Rent has been duly and fully paid to and including the respective due dates immediately preceding the date of such request, and that the party requesting such statement has performed all obligations contained in this agreement to the date of such request.

ARTICLE XVI

Termination

Section 16.01 Unless Tenant exercises the option provided in Article XIII hereof, or as provided in Article VIII or Article IX hereof, at the termination of this agreement for any reason, Tenant and the tenants and subtenants under Tenant, and any and all persons holding or claiming under Tenant, shall surrender possession of the Land and the Improvements to Landlord, maintained as herein provided for, ordinary wear and tear and depreciation and damage by fire or other casualty excepted, and free of any and all claim thereto by Tenant or any party holding under Tenant.

Section 16.02 At any time during the term of this agreement, or upon termination for any reason and provided Tenant is not then in default hereunder, Tenant and the tenants and subtenants under Tenant and any and all persons holding or claiming under Tenant shall have the right to remove from the Land and the Improvements all their fixtures, equipment, machinery and all other property, provided, however, that Tenant or the person so removing such property shall repair any damage to the Land and Improvements by the removal thereof.

ARTICLE XVII

Invalidity of Particular Provisions

Section 17.01 If any term or provision of this agreement or the application thereof to any person or circumstance shall, to any extent, be invalid or unenforceable, the remainder of this agreement, or the application of such term or provision to persons or circumstances other than those as to which it is held invalid or unenforceable, shall not be affected thereby, and each term and provision of this agreement shall be valid and be enforced to the fullest extent permitted by law.

ARTICLE XVIII

Notices

Section 18.01 All notices, demands and requests required under this agreement shall be in writing. All such notices, demands and requests shall be deemed to have been properly given if served personally, or if sent by United States registered mail, postage prepaid, addressed as hereinafter provided. All such notices, demands and requests mailed to Landlord shall be addressed to Landlord at 1425 Beaver Avenue, Pittsburgh, Pennsylvania 15233, or at such other address (and addressed to the attention of such officer or other person) as Landlord may from time to time designate by written notice to Tenant. All such notices, demands and requests mailed to Tenant shall be addressed to Tenant at 435 Sixth Avenue, Pittsburgh, Pennsylvania 15219, or at such other address (and addressed to the attention of such officer or other person) as Tenant may from time to time designate by written notice to Landlord.

Section 18.02 Notices, demands and requests which shall be served by registered mail upon Landlord and Tenant in the manner aforesaid shall be deemed sufficiently served or given for all purposes hereunder at the time such notice, demand or request shall be mailed by United States registered mail as aforesaid in any post office or branch post office regularly maintained by the United States Postal Service.

ARTICLE XIX

Condition of and Title to Property Quiet Enjoyment

Section 19.01 Landlord covenants and agrees that Tenant, upon payment of the Net Rent and other sums herein provided for and observing and keeping all covenants, agreements and conditions of this agreement on its part to be observed and kept, shall quietly have and enjoy the Land and the Improvements during the term of this agreement without hindrance or molestation by anyone claiming by, or through Landlord, subject, however, to the exceptions reservations and conditions of this agreement.

ARTICLE XX

Arbitration and Waiver of Jury Trial

Section 20.01 Except as otherwise provided in this Article, all disputes arising between Landlord and Tenant under this agreement shall be subject to arbitration in accordance with the provisions of this Article. All such disputes shall be submitted to the American Arbitration Association or its successor, and all proceedings shall be conducted

according to its rules except that the arbitrator shall be an attorney. No action at law or in equity in connection with any such dispute shall be brought until the arbitrator shall have rendered a decision in connection with such dispute or until arbitration thereof shall have been waived, either expressly or pursuant to Section 20.03 hereof.

Section 20.02 Tenant shall have no right to arbitrate with reference to the payment or non-payment of Net Rent unless on or before the due date thereof a written claim or setoff, specifying the ground therefor, has been given by Tenant to Landlord.

Section 20.03 All disputes subject to arbitration in accordance with this Article shall be raised by notice to the other party, which notice shall state with particularity the nature of the dispute and the demand for relief, making specific reference, by Article, Section and paragraph, to the provisions of this agreement alleged to give rise to the dispute. Such notice shall also refer to this Article and shall state whether the party giving notice demands arbitration. If no demand for arbitration is contained in such notice, the party against whom relief is sought shall have the right to give written demand for arbitration under this Section to the other party within thirty (30) days after such notice. Unless one of the parties thus demands arbitration, the provisions of this Article shall be deemed to have been waived.

Section 20.04 During any arbitration proceeding pursuant to this Article, the parties shall continue to perform and discharge all their respective obligations under this agreement. The performance of any obligation here-

under shall not be excused merely because a demand for arbitration affecting that performance has been made, nor shall a party exercise, prior to the rendering of a decision by the arbitrator in connection with such dispute, or prior to the expiration of any period of time established by the arbitrator for compliance with his decision, any other remedy which would destroy the efficacy of the arbitration proceeding.

Section 20.05 Landlord and Tenant shall and do hereby waive trial by jury in any action, proceeding or counterclaim arising out of or in any way connected with this agreement.

ARTICLE XXI

Disposition Contract

Section 21.01 This agreement is subject to the terms and conditions set forth in the Disposition Contract between the Urban Redevelopment Authority of Pittsburgh and Tenant dated March 30, 1976, which is incorporated herein by reference thereto, and if there is any conflict in the terms and conditions of this agreement and said Disposition Contract, then the terms and conditions of the Disposition Contract shall control.

ARTICLE XXII

Miscellaneous

Section 22.01 Immediately following the execution and delivery of this agreement, Landlord and Tenant shall execute, acknowledge and deliver the memorandum of lease in the form set forth in Exhibit I attached hereto and made a part hereof and shall cause the same to be recorded, at the cost of Landlord, in the office of the Recorder of Deeds of Allegheny County, Pennsylvania.

Section 22.02 The captions of this agreement and the table of contents preceding this agreement are for convenience and reference only and in no way define, limit or describe the scope or intent hereof.

Section 22.03 It is the intention of the parties hereto that as long as the Mortgage shall be outstanding the estate acquired hereunder by Tenant shall not merge with or into any other estate, whether lesser or greater, in the Land now held or hereafter acquired by Tenant or by any disclosed or undisclosed principal of Tenant.

Section 22.04 As used in this agreement, the words "term of this agreement" shall mean the original term hereof and any renewal term for which Tenant has exercised its option to renew as provided in Article XII hereof, or any holdover period of the original term or any renewal term.

Section 22.05 This agreement shall be construed and enforced in accordance with the laws of the Commonwealth of Pennsylvania.

Section 22.06 The covenants and agreements herein contained shall bind and inure to the benefits of Landlord, its successors and assigns, and Tenant, its successors and assigns, except as otherwise provided herein.

IN WITNESS WHEREOF, Landlord and Tenant have duly executed this Lease and Sublease Agreement the day and year first above written.

DUQUESNE LIGHT COMPANY

Attest:

_____ By _____

Secretary

[Corporate Seal]

MELLON-STUART REALTY CO.

Attest:

_____ By _____

Secretary Vice President

[Corporate Seal]

MEMORANDUM OF LEASE AND SUBLEASE

MADE AND ENTERED INTO for the purpose of recording in accordance with the Act of June 2, 1959, P.L. 454 §2, 21 Purdon's Stat. Ann §405 as of the 1st day of June, 1977, by and between MELLON-STUART REALTY CO., a Pennsylvania business corporation, and DUQUESNE LIGHT COMPANY, a Pennsylvania business corporation, parties to the Lease and Sublease Agreement dated as of June 1, 1977, (hereinafter sometimes called the "Lease and Sublease"), as follows:

I. The name of the lessor in the Lease and Sublease is Mellon-Stuart Realty Co., a Pennsylvania business corporation.

II. The name of the lessee in the Lease and Sublease is Duquesne Light Company, a Pennsylvania business corporation.

III. The address of Mellon-Stuart Realty Co. is 1425 Beaver Avenue, Pittsburgh, Pennsylvania 15233; and the address of Duquesne Light Company is 435 Sixth Avenue, Pittsburgh, Pennsylvania 15219.

IV. The date of the Lease and Sublease is as of June 1, 1977.

V. The demised premises as described in the Lease and Sublease consist of a lease of the Improvements erected on and a sublease of the leasehold interest of Mellon-Stuart Realty Co. in the following property:

BEING a portion of Parcel No. 8-A and No. 8-B of the Urban Redevelopment Authority of Pittsburgh, Woods Run Redevelopment Project Penna. R-285 (part of Redevelopment Area No. 15), situate in the 27th Ward of the City of Pittsburgh, Allegheny County, Pennsylvania, more particularly bounded and described as follows:

BEGINNING at a point which point is distant the following six (6) courses and distances from a point on the Westerly right of way line of New Beaver Avenue at the dividing line between land of Duquesne Light Company and land conveyed by Urban Redevelopment Authority of Pittsburgh to Allegheny Drop Forge Company by deed dated August 1, 1974, and recorded August 2, 1974, in Deed Book Volume 5372, page 181, viz: (1) along the Westerly right of way line of New Beaver Avenue, North 28° 10' 59" West, 931.610 feet to a point of curve; (2) in a general Westerly direction by the arc of a circle curving to the left

PROPERTY DESCRIPTION

BEING a portion of Parcel No. 8-A and No. 8-B of the Urban Redevelopment Authority of Pittsburgh, Woods Run Redevelopment Project Penna. R-285 (part of Redevelopment Area No. 15), situate in the 27th Ward of the City of Pittsburgh, Allegheny County, Pennsylvania, more particularly bounded and described as follows:

BEGINNING at a point which point is distant the following six (6) courses and distances from a point on the Westerly right of way line of New Beaver Avenue at the dividing line between land of Duquesne Light Company and land conveyed by Urban Redevelopment Authority of Pittsburgh to Allegheny Drop Forge Company by deed dated August 1, 1974, and recorded August 2, 1974, in Deed Book Volume 5372, page 181, viz: (1) along the Westerly right of way line of New Beaver Avenue, North 28° 10' 59" West, 931.610 feet to a point of curve; (2) in a general Westerly direction by the arc of a circle curving to the left having a radius of 25 feet an arc distance of 33.080 feet to a point on the Southerly right of way line of Doerr Street (50 feet wide); (3) thence along the Southerly right of way line of Doerr Street, South 76° 00' 15" West, 361.011 feet to an angle point; (4) thence continuing along the Southerly right of way line of Doerr Street, South 79° 17' 13" West, 58.842 feet to a point; (5) thence by a line through land of which this is a part, said line being the centerline of a private road, 30 feet in width, South 28° 10' 59" East, 280.035 feet; (6) thence by a line in said private road, South 61°49' 01" West, 15.00 feet to a point in the Westerly line of said 30 foot private road and being the true point of beginning of the

leased premises; thence from said true point of beginning by the Westerly side of said 30 foot private road, South 28° 10' 59" East, 337.25 feet to a point; thence by a line through land of which this is a part, South 61° 49' 01" West, 303.61 feet to a point on line of land of the Pittsburgh and Western Railroad; thence by line of land of said Railroad, North 33° 43' 52" West, 338.84 feet to a point; thence by a line through land of which this is a part, North 61° 49' 01" East, 336.37 feet to the point at the place of beginning. Containing 2.48 acres.

TOGETHER WITH the right to use in common with the Landlord and others for the term of the lease as a means of access to and from the leased premises, a private road, 30 feet wide, leading from the leased premises to Doerr Street, the centerline of said 30 foot private road being more particularly located and more particularly described as follows:

BEGINNING at a point on the Southerly right of way line of Doerr Street, which point is distant the following four (4) courses and distances from a point on the Westerly right of way line of New Beaver Avenue at the dividing line between land of Duquesne Light Company and land conveyed by Urban Redevelopment Authority of Pittsburgh to Allegheny Drop Forge Company by deed dated August 1, 1974 and recorded August 2, 1974 in Deed Book Volume 5372, page 181, viz: (1) along the Westerly right of way line of New Beaver Avenue, North 28° 10' 59" West, 931.610 feet to a point of curve; (2) in a general Westerly direction by the arc of a circle curving to the left having a radius of 25 feet an arc distance of 33.080 feet to a point on the Southerly right of way line of Doerr Street (50 feet wide); (3) thence along the Southerly right of way

line of Doerr Street, South 76° 00' 15" West, 361.011 feet to an angle point; (4) thence continuing along the Southerly right of way line of Doerr Street, South 79° 17' 13" West, 58.842 feet to a point being the true point of beginning; thence from said true point of beginning by a line through land of which this is a part, said line being the centerline of the 30 foot private road, South 28° 10' 59" East, 617.285 feet to a point which point is distant North 61° 49' 01" East, 15.00 feet from the Southeast corner of the leased premises.

Landlord agrees to maintain at its sole expense said private road and to make repairs to the same when necessary and at the request of the Tenant grant such other easements as may be necessary to enable the leased premises to be adequately served by gas, electric, water, sewer and other utilities.

The above descriptions were prepared in accordance with a Plan of Survey prepared and certified by T. B. McAuliffe, Professional Engineer, dated September 14, 1976, last revised, April 12, 1977, being Drawing No. R. E. 2581-LL-7172.

having a radius of 25 feet an arc distance of 33.080 feet to a point on the Southerly right of way line of Doerr Street (50 feet wide); (3) thence along the Southerly right of way line of Doerr Street, South 76° 00' 15" West, 361.011 feet to an angle point; (4) thence continuing along the Southerly right of way line of Doerr Street, South 79° 17' 13" West, 58.842 feet to a point; (5) thence by a line through land of which this is a part, said line being the centerline of a private road, 30 feet in width, South 28° 10' 59" East, 280.035 feet; (6) thence by a line in said private road, South 61° 49' 01" West, 15.00 feet to a point in the Westerly line of said 30 foot private road and being the true point of beginning of the leased premises; thence from said true point of beginning by the Westerly side of said 30 foot private road, South 28° 10' 59" East, 337.25 feet to a point; thence by a line through land of which this is a part, South 61° 49' 01" West, 303.61 feet to a point on line of land of the Pittsburgh and Western Railroad; thence by line of land of said Railroad, North 33° 43' 52" West, 338.84 feet to a point; thence by a line through land of which this is a part, North 61° 49' 01" East, 336.37 feet to the point at the place of beginning. Containing 2.48 acres.

Together with the right to use in common with Duquesne Light Company and others said private road as a means of access to and from the premises to Doerr Street, the centerline of said 30 foot private road being more particularly located and more particularly described as follows:

BEGINNING at a point on the Southerly right of way line of Doerr Street, which point is distant the following four (4) courses and distances from a point on the Westerly right of way line of New Beaver Avenue at the dividing line between land of Duquesne Light Company and land conveyed by Urban Redevelopment Authority of Pittsburgh to Allegheny Drop Forge Company by deed dated August 1, 1974 and recorded August 2, 1974 in Deed Book Volume 5372, page 181, viz: (1) along the Westerly right of way line of New Beaver Avenue, North 28° 10' 59" West, 931.610 feet to a point of curve; (2) in a general Westerly direction by the arc of a circle curving to the left having a radius of 25 feet an arc distance of 33.080 feet to a point on the Southerly right of way line of Doerr Street (50 feet wide); (3) thence along the Southerly right of way line of Doerr Street, South 76° 00' 15" West, 361.011 feet to an angle point; (4) thence continuing along the Southerly right of way line of Doerr Street, South 79° 17' 13" West, 58.842 feet

to a point being the true point of beginning; thence from said true point of beginning by a line through land of which this is a part, said line being the centerline of the 30 foot private road, South 28° 10' 59" East, 617.285 feet to a point which point is distant North 61° 49' 01" East, 15.00 feet from the Southeast corner of the leased premises.

VI. The date of the commencement of the term of the Lease and Sublease is June 15, 1977.

VII. The term of the Lease and Sublease commences on June 15, 1977, and expires on December 31, 2007 unless sooner terminated in accordance with the provisions of the Lease and Sublease or otherwise by law.

VIII. The Lease and Sublease has four renewal options of five years each, the term of the last renewal term expiring December 31, 2027.

IX. Duquesne Light Company, the lessee in the Lease and Sublease, has the right to purchase the leasehold interest of the lessor and the improvements erected thereon at any time after the tenth anniversary of the Lease and Sublease.

IN WITNESS WHEREOF, the parties to the Lease and Sublease have executed this Memorandum of Lease and Sublease as of the day and year first above written.

MELLON-STUART REALTY CO.

Attest:

_____
Secretary

By _____
Vice President

[Corporate Seal]

DUQUESNE LIGHT COMPANY

Attest:

_____
Secretary

By _____

[Corporate Seal]

COMMONWEALTH OF PENNSYLVANIA)
) ss:
COUNTY OF ALLEGHENY)

On this the _____ day of June, 1977, before me a Notary Public personally appeared Tracy E. Greenholt, who acknowledged himself to be Vice President of MELLON-STUART REALTY CO., a Pennsylvania business corporation, that he, as such officer, being authorized to do so, executed the foregoing Memorandum of Lease and Sublease for the purposes therein contained by signing the name of the corporation by himself as such officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

_____
Notary Public

My Commission Expires:

COMMONWEALTH OF PENNSYLVANIA)
) ss:
COUNTY OF ALLEGHENY)

On this the _____ day of June, 1977, before me a Notary Public, personally appeared _____, who acknowledged himself to be _____ of DUQUESNE LIGHT COMPANY, that he, as such officer, being authorized to do so, executed the foregoing Memorandum of Lease and Sublease for the purposes therein contained by signing the name of the corporation by himself as such officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

_____
Notary Public

My Commission Expires:

MEMORANDUM OF LEASE

MADE AND ENTERED INTO for the purpose of recording in accordance with the Act of June 2, 1959, P.L. 454 §2, 21 Purdon's Stat. Ann. §405, as of the 30th day of March, 1976, by and between DUQUESNE LIGHT COMPANY, a Pennsylvania business corporation, and MELLON-STUART REALTY CO., a Pennsylvania business corporation, parties to the Land Lease Agreement dated as of March 30, 1976 (hereinafter sometimes called the "Land Lease"), as follows:

I. The name of the lessor in the Land Lease is Duquesne Light Company, a Pennsylvania business corporation.

II. The name of the lessee in the Land Lease is Mellon-Stuart Realty Co., a Pennsylvania business corporation.

III. The address of Duquesne Light Company is 435 Sixth Avenue, Pittsburgh, Pennsylvania 15219; and the address of Mellon-Stuart Realty Co. is 1425 Beaver Avenue, Pittsburgh, Pennsylvania 15233.

IV. The date of the Land Lease is as of March 30, 1976.

V. The demised premises as described in the Land Lease is as follows:

BEING a portion of Parcel No. 8-A and No. 8-B of the Urban Redevelopment Authority of Pittsburgh, Woods Run Redevelopment Project Penna. R-285 (part of Redevelopment Area No. 15), situate in the 27th Ward of the City of Pittsburgh, Allegheny County, Pennsylvania, more particularly bounded and described as follows:

BEGINNING at a point which point is distant the following six (6) courses and distances from a point on the Westerly right of way line of New Beaver Avenue at the dividing line between land of Duquesne Light Company and land conveyed by Urban Redevelopment Authority of Pittsburgh to Allegheny Drop Forge Company by deed dated August 1, 1974, and recorded August 2, 1974, in Deed Book Volume 5372, page 181, viz: (1) along the Westerly right of way line of New Beaver Avenue, North 28° 10' 59" West, 931.610 feet to a point of curve; (2) in a general Westerly direction by the arc of a circle curving to the left having a radius of 25 feet an arc distance of 33.080 feet to a point on the Southerly right of way line of Doerr Street (50 feet wide); (3) thence along the Southerly right of way line of Doerr Street, South 76° 00' 15" West, 361.011 feet

to an angle point; (4) thence continuing along the Southerly right-of-way line of Doerr Street, South 79° 17' 13" West, 58.842 feet to a point; (5) thence by a line through land of which this is a part, said line being the centerline of a private road, 30 feet in width, South 28° 10' 59" East, 280.035 feet; (6) thence by a line through said 30 foot private road, South 61° 49' 01" West, 15.00 feet to a point in the Westerly line of said 30 foot private road and being the true point of beginning of the leased premises; thence from said true point of beginning by the Westerly side of said 30 foot private road, South 28° 10' 59" East, 337.25 feet to a point; thence by a line through land of which this is a part, South 61° 49' 01" West, 303.61 feet to a point on line of land of the Pittsburgh and Western Railroad; thence by line of land of said Railroad, North 33° 43' 52" West, 338.84 feet to a point; thence by a line through land of which this is a part, North 61° 49' 01" East, 336.37 feet to the point at the place of beginning. Containing 2.48 acres.

Together with the right to use in common with Duquesne Light Company and others said private road as a means of access to and from the leased premises to Doerr Street, the centerline of said 30 foot private road being more particularly located and more particularly described as follows:

BEGINNING at a point on the Southerly right-of-way line of Doerr Street which point is distant the following four (4) courses and distances from a point on the Westerly right-of-way line of New Beaver Avenue at the dividing line between land of Duquesne Light Company and land conveyed by Urban Redevelopment Authority of Pittsburgh to Allegheny Drop Forge Company by deed dated August 1, 1974, and recorded August 2, 1974 in Deed Book Volume 5372, page 181, viz: (1) along the Westerly right-of-way line of New Beaver Avenue, North 28° 10' 59" West, 931.610 feet to a point of curve; (2) in a general Westerly direction by the arc of a circle curving to the left having a radius of 25 feet an arc distance of 33.080 feet to a point on the Southerly right-

of-way line of Doerr Street (50 feet wide); (3) thence along the Southerly right-of-way line of Doerr Street, South 76° 00' 15" West, 361.011 feet to an angle point; (4) thence continuing along the Southerly right-of-way line of Doerr Street, South 79° 17' 13" West, 58.842 feet to a point being the true point of beginning; thence from said true point of beginning by a line through land of which this is a part said line being the centerline of the 30 foot private road, South 28° 10' 59" East, 617.285 feet to a point which point is distant North 61° 49' 01" East, 15.00 feet from the Southeast corner of the leased premises.

VI. The date of the commencement of the term of the Land Lease is March 30, 1976.

VII. The term of the Land Lease commences on March 30, 1976, and expires on December 31, 2027, unless sooner terminated in accordance with the provisions of the Land Lease or otherwise by law.

VIII. The Land Lease contains no right of extension or renewal.

IX. Mellon-Stuart Realty Co., the lessee in the Land Lease, has no right of purchase of or refusal on the demised premises or any part thereof.

IN WITNESS WHEREOF, the parties to the Land Lease Agreement have executed this Memorandum of Lease the day and year first above written.

Attest: DUQUESNE LIGHT COMPANY

_____ By _____
Secretary

[Corporate Seal]

Attest: MELLON-STUART REALTY CO.

_____ By _____
Secretary Vice President

[Corporate Seal]

COMMONWEALTH OF PENNSYLVANIA)
) ss:
COUNTY OF ALLEGHENY)

On this, the _____ day of June, 1977, before me, a Notary Public, personally appeared _____, who acknowledged himself to be _____ of Duquesne Light Company and that he, as such officer, being authorized to do so, executed the foregoing Memorandum of Lease for the purposes therein contained by signing the name of the corporation by himself as such officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

_____
Notary Public

My Commission Expires:

COMMONWEALTH OF PENNSYLVANIA)
) ss:
COUNTY OF ALLEGHENY)

On this, the _____ day of June, 1977, before me, a Notary Public, personally appeared Tracy E. Greenholt, who acknowledged himself to be Vice President of Mellon-Stuart Realty Co., and that he, as such officer, being authorized to do so, executed the foregoing Memorandum of Lease for the purposes therein contained by signing the name of the corporation by himself as such officer.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.

_____
Notary Public

My Commission Expires:

FILE CONTINUED