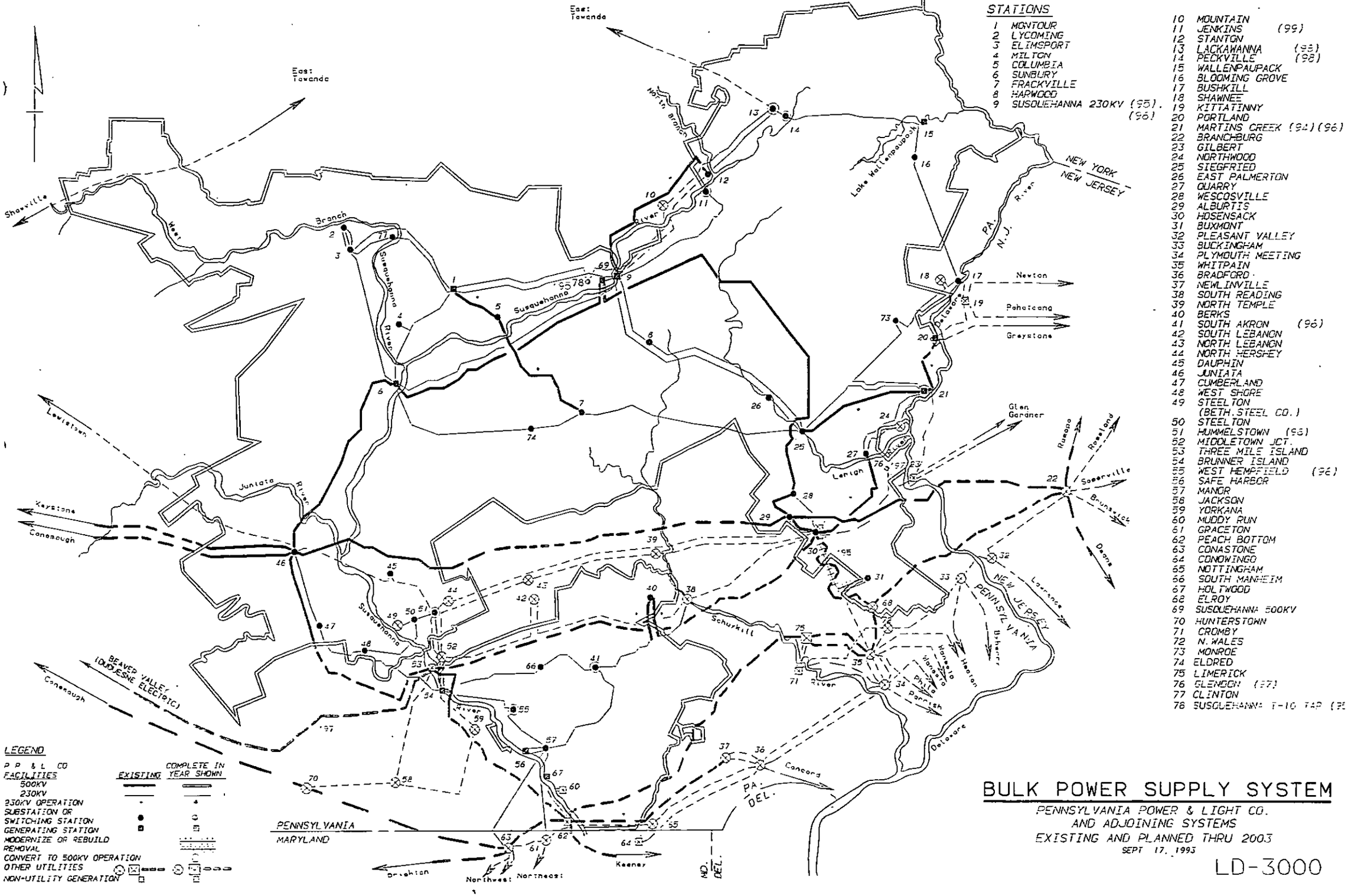
APPENDIX C

MAPS



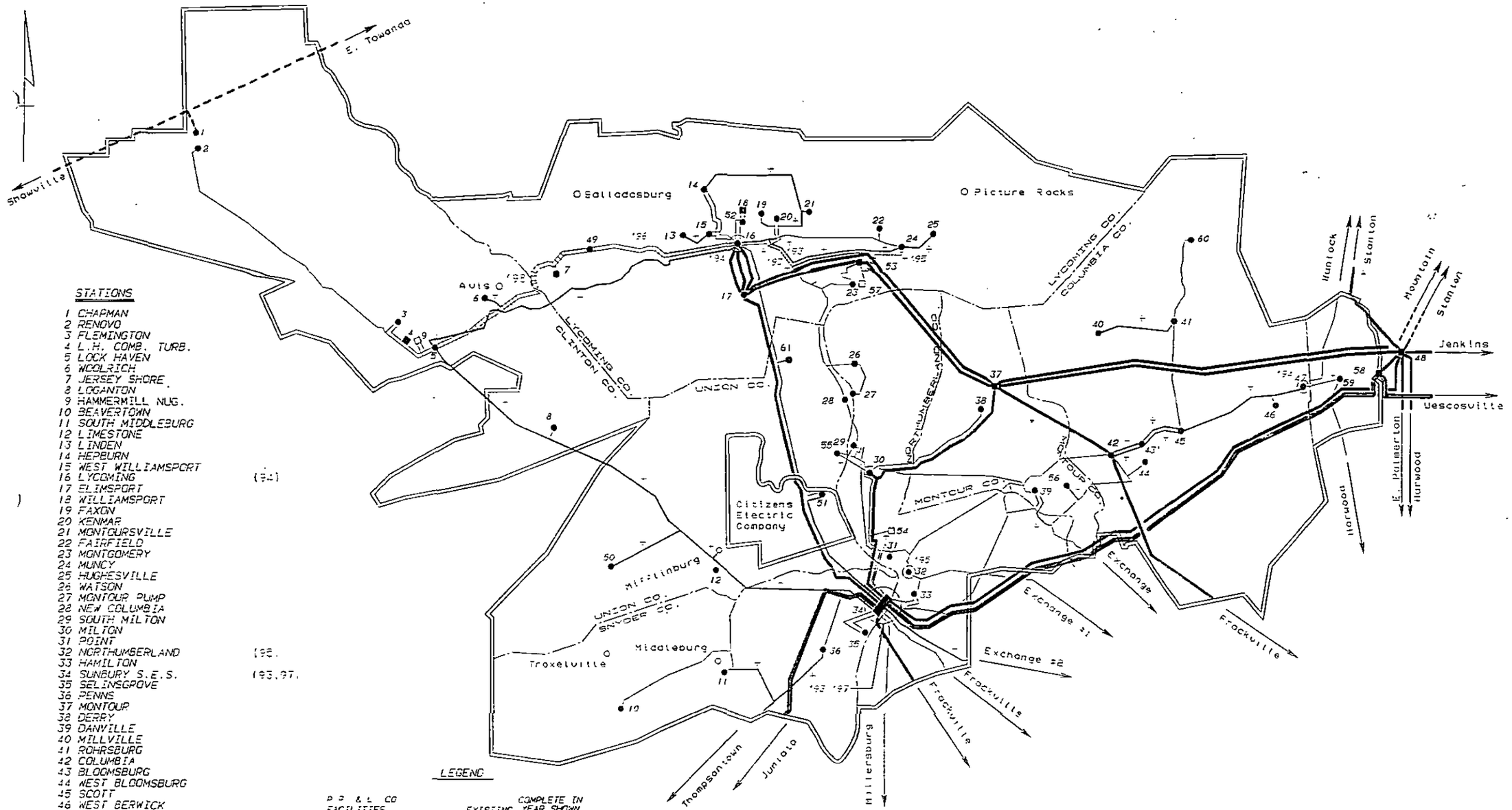
LEGEND

P P & L CO FACILITIES	EXISTING	COMPLETE IN YEAR SHOWN
500KV		
230KV		
230KV OPERATION		
SUBSTATION OR SWITCHING STATION		
GENERATING STATION		
MODERNIZE OR REBUILD		
REMOVAL		
CONVERT TO 500KV OPERATION		
OTHER UTILITIES		
NON-UTILITY GENERATION		

BULK POWER SUPPLY SYSTEM

PENNSYLVANIA POWER & LIGHT CO.
AND ADJOINING SYSTEMS
EXISTING AND PLANNED THRU 2003
SEPT 17, 1993

LD-3000



STATIONS

1 CHAPMAN
2 RENOVO
3 FLEMINGTON
4 L.H. COMB. TURB.
5 LOCK HAVEN
6 WOOLRICH
7 JERSEY SHORE
8 LOGANTON
9 HAMMERMILL NUG.
10 BEAVERTOWN
11 SOUTH MIDDLEBURG
12 LIMESTONE
13 LINDEN
14 HEPBURN
15 WEST WILLIAMSPORT
16 LYCOMING (94)
17 ELIMSPORT
18 WILLIAMSPORT
19 FAXON
20 KENMAR
21 MONTOURSVILLE
22 FAIRFIELD
23 MONTGOMERY
24 MUNCY
25 HUGHESVILLE
26 WATSON
27 MONTOUR PUMP
28 NEW COLUMBIA
29 SOUTH MILTON
30 MILTON
31 POINT
32 NORTHUMBERLAND (98.
33 HAMILTON
34 SUNBURY S.E.S. (93,97.
35 SELINSGROVE
36 PENNS
37 MONTOUP
38 DERRY
39 DANVILLE
40 MILLVILLE
41 ROHRSBURG
42 COLUMBIA
43 BLOOMSBURG
44 WEST BLOOMSBURG
45 SCOTT
46 WEST BERWICK
47 BERWICK (94
48 SUSQUEHANNA 230KV
49 LARRYS CREEK
50 LAURELTON
51 LEWISBURG 138KV
52 SOUTH WILLIAMSPORT
53 CLINTON
54 VIKING NUG
55 KELLY
56 EAST DANVILLE
57 KOPPERS NUG
58 SUSQUEHANNA 500KV
59 SALEM
60 BENTON
61 ALLENWOOD (TEMPORARY)

LEGEND

P P & L CO FACILITIES	EXISTING	COMPLETE IN YEAR SHOWN
500KV		
230KV		
138KV		
69KV		
500KV CONSTR -230KV OPER		
138KV CONSTR -69KV OPER		
SUBSTATION OR SWITCHING STATION		
GENERATING STATION		
MODERNIZE OR REBUILD		
REMOVAL		
COMMUNITIES	C	
CONVERT TO 138KV OPERATION		
CONVERT TO 500KV OPERATION		
OTHER UTILITIES		
NON UTILITY GENERATION		

DEVELOPMENT OF POWER SUPPLY
EXISTING AND PLANNED THRU 1998

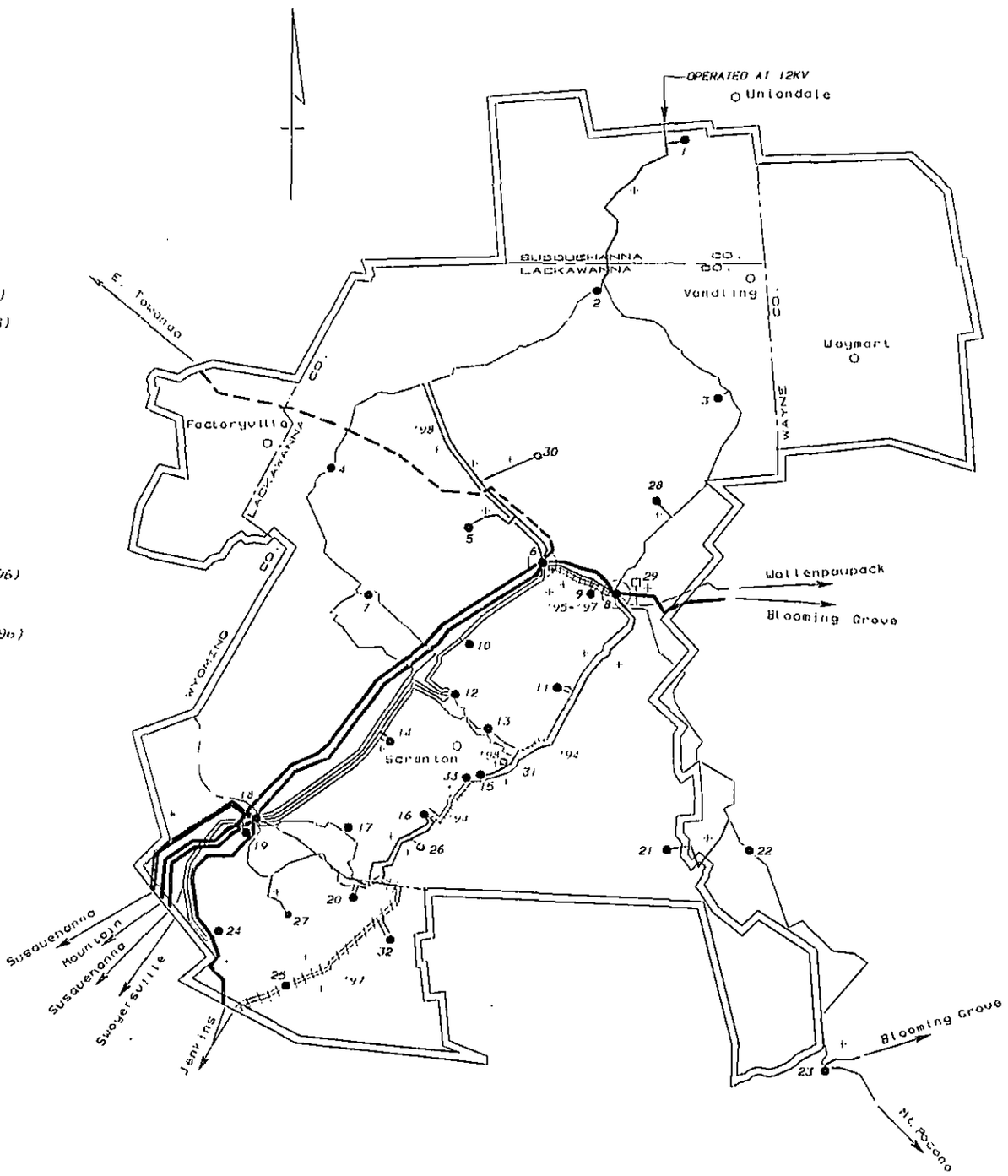
SUSQUEHANNA DIVISION

PENNSYLVANIA POWER & LIGHT CO.
SYSTEM PLANNING DEPARTMENT

LD-3001

STATIONS

1 TINKER
2 GREENFIELD
3 EAST CARBONDALE
4 BROOKSIDE
5 COELLA
6 LACKAWANNA (98)
7 MORGAN
8 PECKVILLE (98)
9 EYNON
10 BELMONT
11 THROOP
12 PROVIDENCE
13 SUBURBAN
14 KEYSER AVE.
15 SCRANTON
16 MINOOKA
17 OLD FORGE
18 STANTON
19 SULLIVAN TRAIL
20 AVOCA
21 MOSCOW
22 MADISONVILLE
23 GOULDSBORO
24 EXETER
25 YATESVILLE
26 MONTAGE (96)
27 HUGHESTOWN
28 JERMYN
29 ARCHBALD NUG
30 MONTDALE (96)
31 HILL (98)
32 DUPONT
33 CEDAR AVENUE



LEGEND

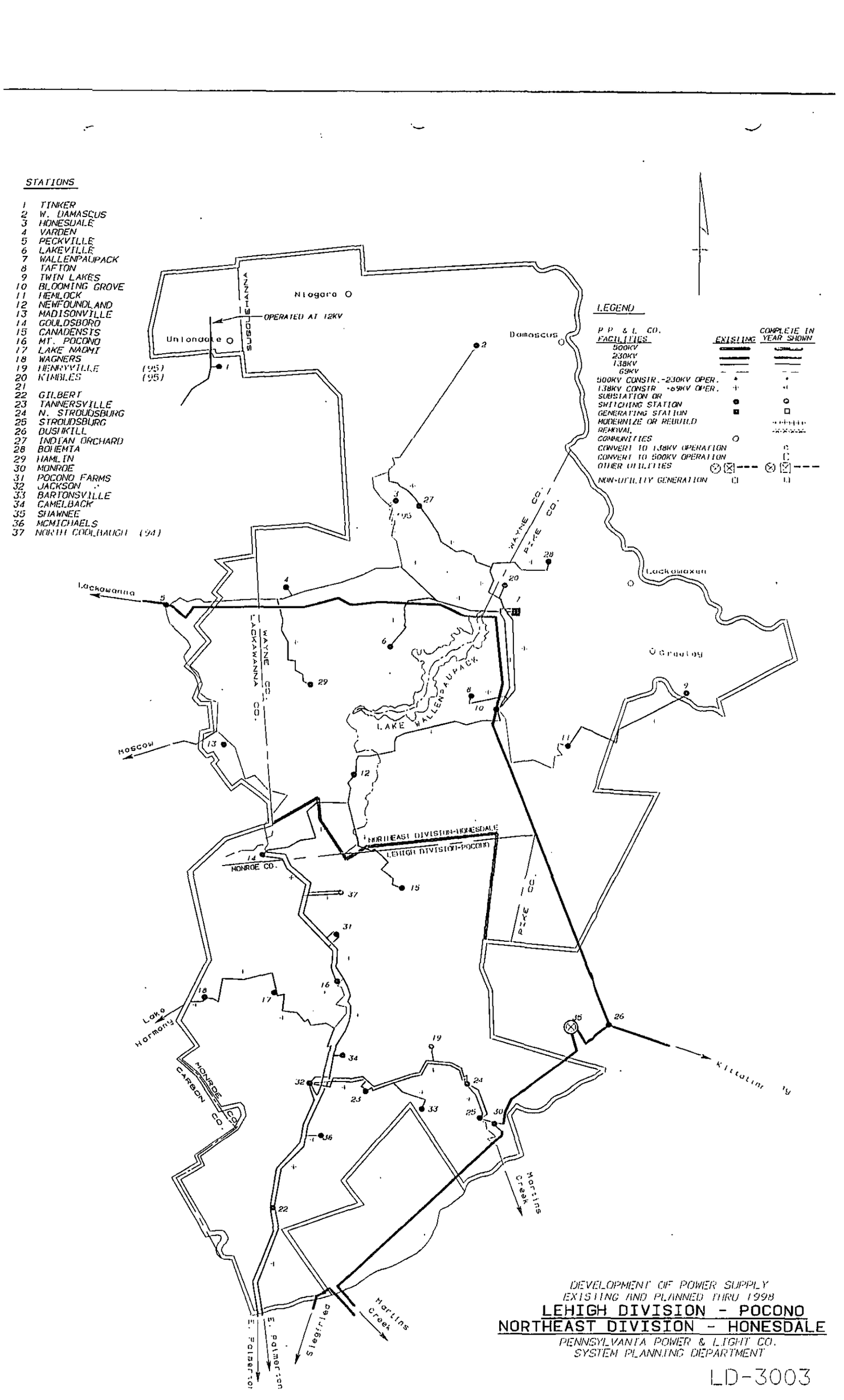
P P & L CO FACILITIES	EXISTING	COMPLETE IN YEAR SHOWN
500KV		
230KV		
138KV		
69KV		
500KV CONSTR -230KV OPER	+	+
138KV CONSTR -69KV OPER	+	+
SUBSTATION OR SWITCHING STATION	●	○
GENERATING STATION	■	□
MODERNIZE OR REBUILD		
REMOVAL		
COMMUNITIES	○	
CONVERT TO 138KV OPERATION		C
CONVERT TO 500KV OPERATION		C
OTHER UTILITIES	⊗⊠---	⊗⊠---
NON-UTILITY GENERATION	□	□

DEVELOPMENT OF POWER SUPPLY
EXISTING AND PLANNED THRU 1998

NORTHEAST DIVISION
SCRANTON AREA

PENNSYLVANIA POWER & LIGHT CO.
SYSTEM PLANNING DEPARTMENT

LD-3002

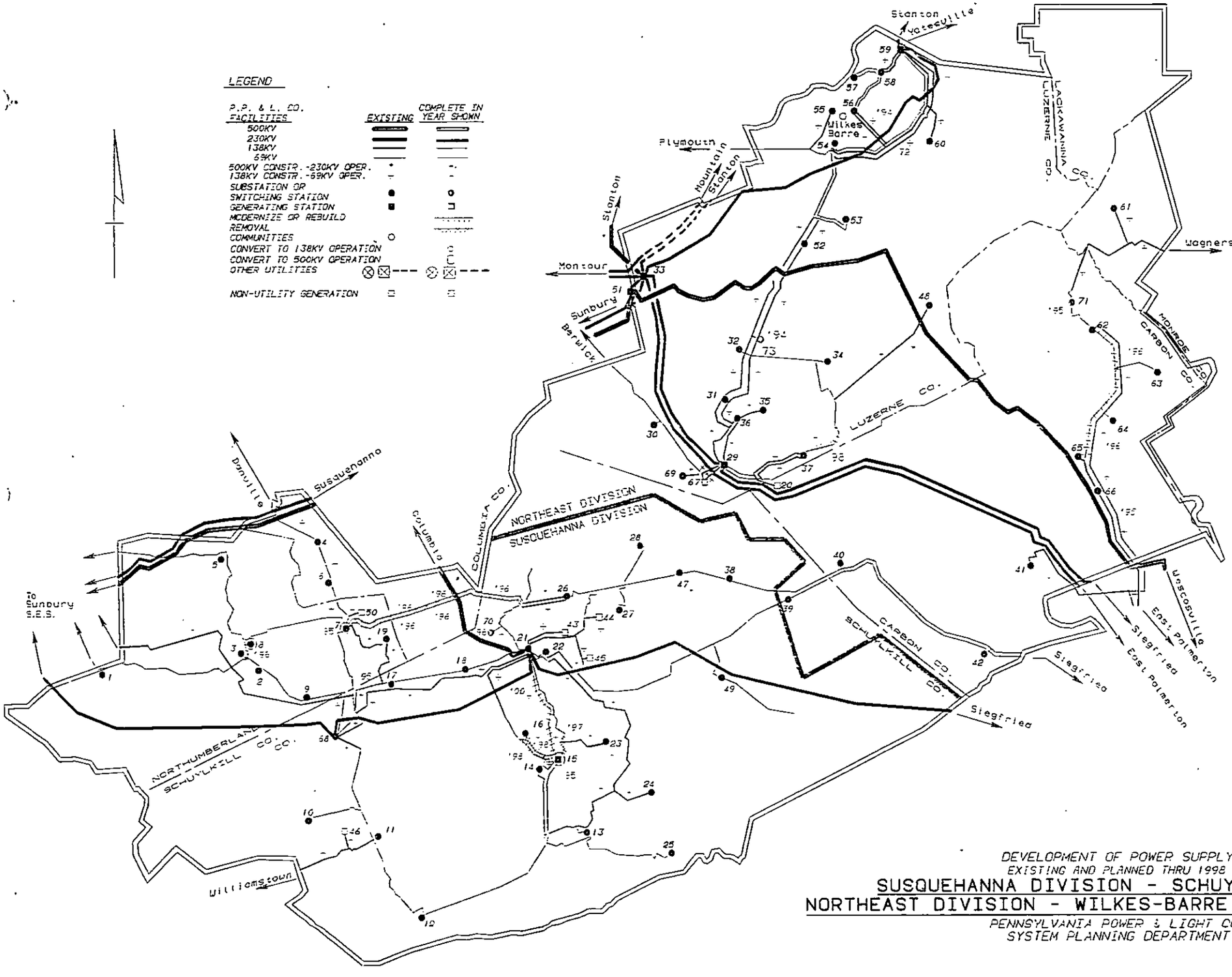


DEVELOPMENT OF POWER SUPPLY
EXISTING AND PLANNED THRU 1998

LEHIGH DIVISION - POCONO
NORTHEAST DIVISION - HONESDALE

PENNSYLVANIA POWER & LIGHT CO.
SYSTEM PLANNING DEPARTMENT

LD-3003



STATIONS

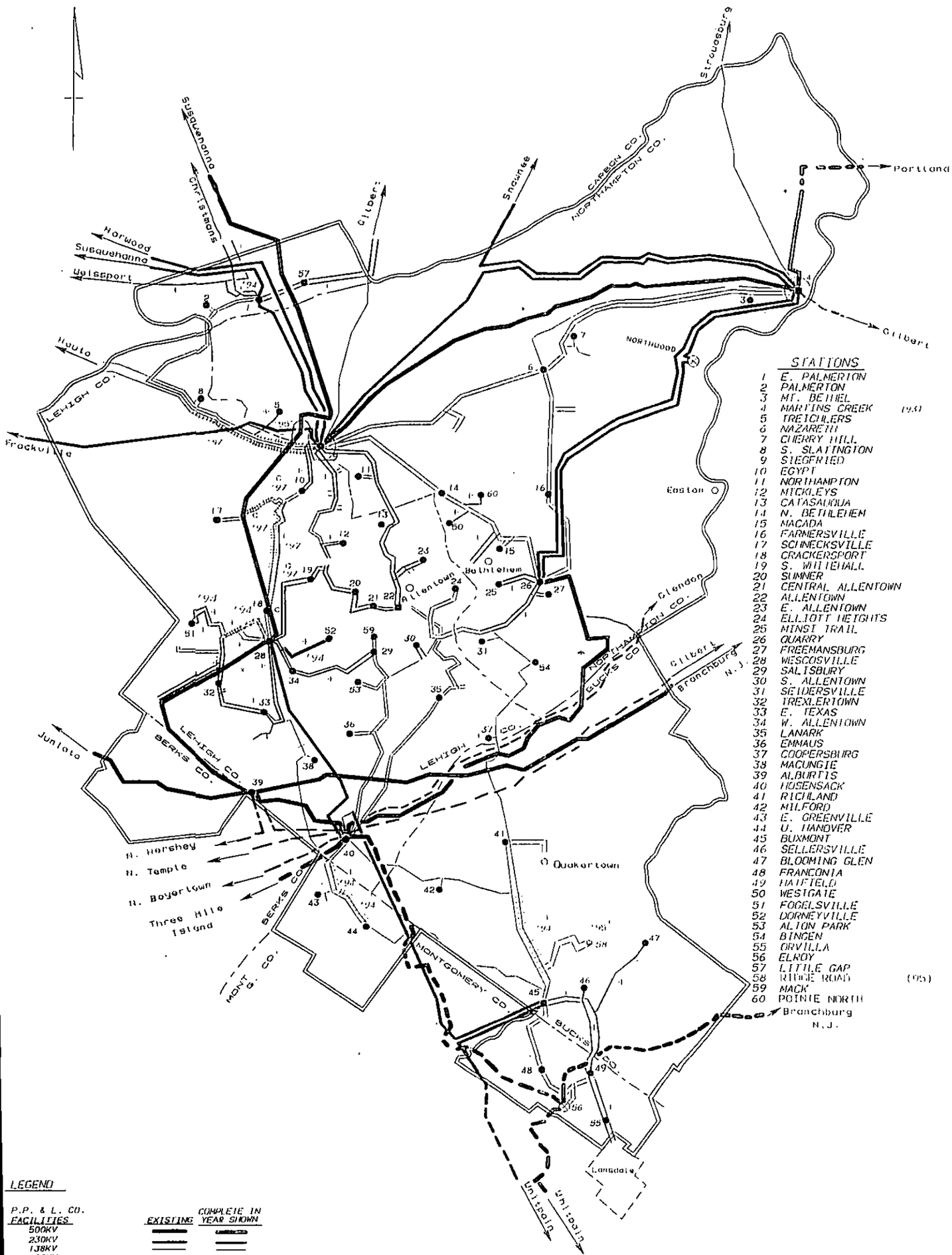
1	HUNTER	
2	FERNDALE	
3	FAIRVIEW	
4	CLEVELAND	
5	REED	
6	BEAR GAP	
7	EXCHANGE	(95)
8	SHAMOKIN	(96)
9	GOWEN CITY	
10	HEGINS	
11	FRAILEY	
12	PINE GROVE	
13	CRESSONA	
14	MAR-LIN	
15	FISHBACH	(95)
16	CASS	
17	MOWRY	
18	FOUNTAIN SPRINGS	
19	MT. CARMEL	
20	NEPCO NUG	
21	FRACKVILLE	
22	ALTAMONT	
23	PORT CARBON	
24	GRWIGSBURG	
25	AUBURN	
26	SHENANDOAH	
27	MAHANOY CITY	
28	GIRARD MANOR	
29	HARWOOD	
30	EAST TOMHICKEN	
31	HARTLAND	
32	ST. JOHNS	
33	SUSQUEHANNA 230KV	
34	FREELAND	
35	HARLEIGH	
36	VALMONT	
37	EAST HAZLETON	
38	TAMANEND	
39	GREENWOOD	
40	HAUTO	
41	WEISSPORT	
42	ASHFIELD	
43	GILBERTON NUG	
44	READING ANTHRACITE NUG	
45	SIGNAL FRACKVILLE NUG	
46	WESTWOOD NUG	
47	DELANO	
48	WHITE HAVEN	
49	TUSCARORA	
50	FOSTER WHEELER-MT. CARMEL NUG	
51	SUSQUEHANNA 500KV	
52	BLYTHEBURN	
53	WRIGHT	
54	WILKES-BARRE	
55	SO. WILKES-BARRE	
56	GEORGETOWN	
57	RIVER	
58	PINE RIDGE	
59	JENKINS	
60	BEAR CREEK	
61	ARROWHEAD	
62	LAKE HARMONY	
63	MECKESVILLE	
64	HICKORY RUN	
65	CHRISTMANS	
66	CARBON	
67	CONTINENTAL NUG	
68	CLORED	(93)
69	HUMBOLDT	
70	GIRARDVILLE	(96)
71	JACK FROST	(95)
72	EAST MOUNTAIN	(94)
73	BUTLER	(94)

DEVELOPMENT OF POWER SUPPLY
EXISTING AND PLANNED THRU 1998

SUSQUEHANNA DIVISION - SCHUYLKILL AREA
NORTHEAST DIVISION - WILKES-BARRE & HAZELTON AREAS

PENNSYLVANIA POWER & LIGHT CO.
SYSTEM PLANNING DEPARTMENT

LD-3004



STATIONS

1	E. PALMERTON	
2	PALMERTON	
3	MT. BETHEL	
4	MARTINS CREEK	(93)
5	TREICHLERS	
6	NAZARETH	
7	CHERRY HILL	
8	S. SLATINGTON	
9	SIEGFRIED	
10	EGYPT	
11	NORTHAMPTON	
12	MICKLEYS	
13	CATASAUQUA	
14	N. BETHLEHEM	
15	MACADA	
16	FARMERSVILLE	
17	SCHNECKSVILLE	
18	CRACKERSPORT	
19	S. WHITEHALL	
20	SUMNER	
21	CENTRAL ALLENTOWN	
22	ALLENTOWN	
23	E. ALLENTOWN	
24	ELLIOTT HEIGHTS	
25	MINSI TRAIL	
26	QUARRY	
27	FREEMANSBURG	
28	WESCOSVILLE	
29	SALISBURY	
30	S. ALLENTOWN	
31	SEIDERSVILLE	
32	TREXLERTOWN	
33	E. TEXAS	
34	W. ALLENTOWN	
35	LANARK	
36	EMMAUS	
37	COOPERSBURG	
38	MACUNGIE	
39	ALBURTIS	
40	HOSENSACK	
41	RICHLAND	
42	MILFORD	
43	E. GREENVILLE	
44	U. HANOVER	
45	BUXMONT	
46	SELLERSVILLE	
47	BLOOMING GLEN	
48	FRANCONIA	
49	HATFIELD	
50	WESTGATE	
51	FOGELSVILLE	
52	DORNEYVILLE	
53	ALTON PARK	
54	BINGEN	
55	ORVILLA	
56	ELROY	
57	LITTLE GAP	
58	RIDGE ROAD	(95)
59	MACK	
60	POINTE NORTH	

Branchburg N.J.

LEGEND

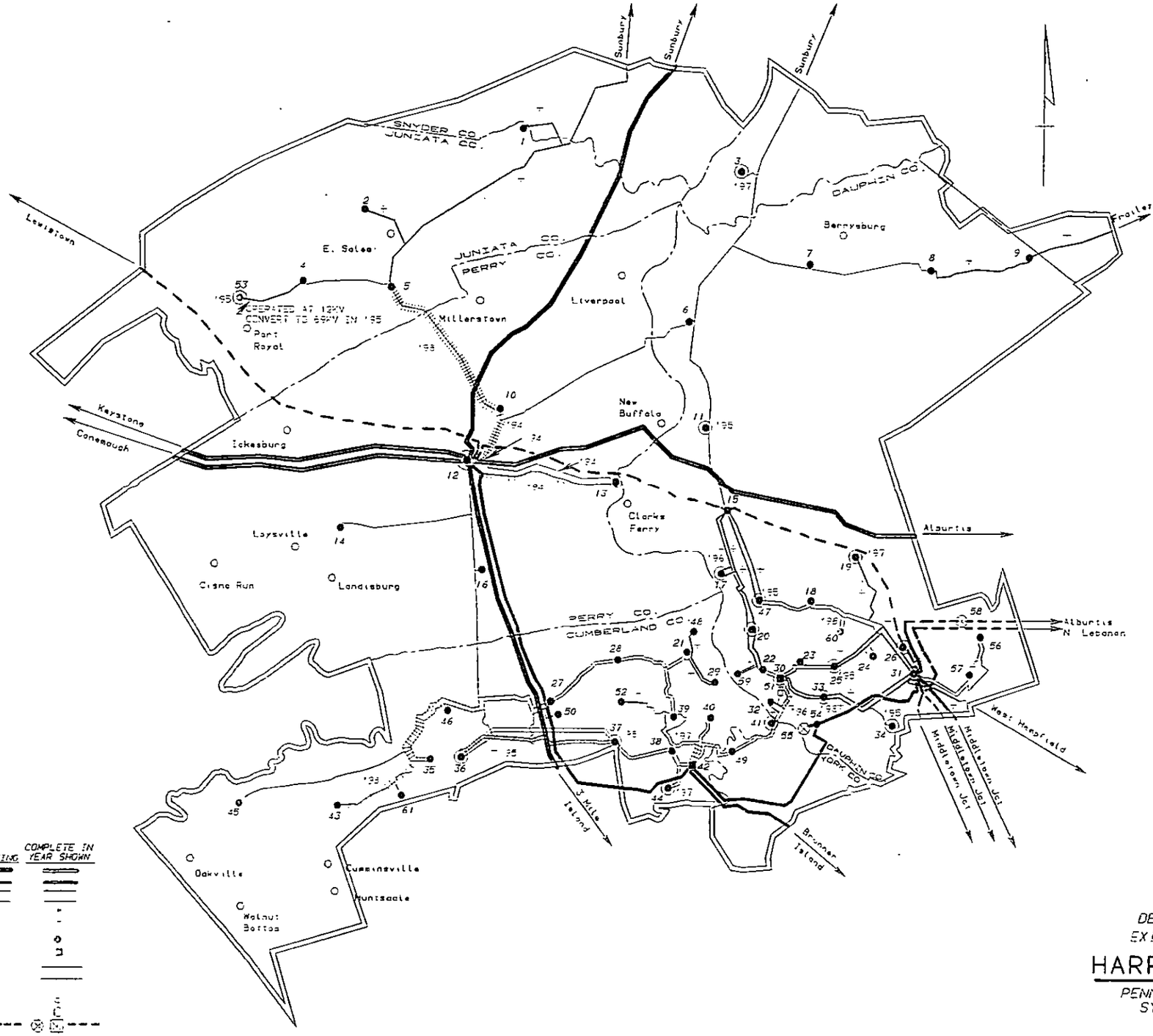
P.P. & L. CO. FACILITIES	EXISTING	COMPLETE IN YEAR SHOWN
500KV		
230KV		
138KV		
69KV		
500KV CONSTR.-230KV OPER.	#	#
138KV CONSTR.-69KV OPER.	‡	‡
SUBSTATION OR SWITCHING STATION	●	○
GENERATING STATION	■	□
MODERNIZE OR REBUILD		
REMOVAL		
COMMUNITIES	○	
CONVERT TO 138KV OPERATION		C
CONVERT TO 500KV OPERATION		C
OTHER UTILITIES	⊗⊠---	⊗⊠---
NON-UTILITY GENERATION	□	□

DEVELOPMENT OF POWER SUPPLY
EXISTING AND PLANNED THRU 1998

LEHIGH DIVISION

PENNSYLVANIA POWER & LIGHT CO.
SYSTEM PLANNING DEPARTMENT

LD-3005



STATIONS

1	RICHFIELD	
2	MCALLISTERVILLE	
3	DALMATIA	('97)
4	WALKER	
5	THOMPSONTOWN	
6	MILLERSBURG	
7	ELIZABETHVILLE	
8	LYKENS	
9	WILLIAMSTOWN	
10	NEWPORT	
11	HALIFAX	('95)
12	JUNIATA	
13	BENVENUE	
14	GREENPARK	
15	DAUPHIN	
16	SHERMANSDALE	
17	ROCKVILLE	('96)
18	COLONIAL PARK	
19	LINGLESTOWN	('97)
20	N. HARRISBURG	('96)
21	ENOLA	
22	WALNUT	
23	LAWNTON	
24	PAXTON	
25	RUTHERFORD	('95)
26	DUKE	('96,'97)
27	CUMBERLAND	
28	WERTZVILLE	
29	PENNSBORO	
30	HARRISBURG	('96)
31	HUMMELSTOWN	('96,'98)
32	CEDAR	
33	OBERLIN	('95)
34	SWATARA	('95)
35	W. CARLISLE	
36	CARLISLE	('94)
37	MECHANICSBURG	('98)
38	ROSSMOYNE	
39	SPORTING HILL	
40	WHITE HILL	
41	ROSEMONT	('95)
42	WEST SHORE	
43	MOUNT ROCK	
44	MT. ALLEN	('97)
45	NEWVILLE	
46	MIDDLETON	
47	WINDSOR	('95)
48	SUMMERDALE	
49	SPANGLER	
50	NEW KINGSTOWN	
51	HARRISBURG MSW	
52	HAMPDEN	
53	MIFFLINTOWN	('95)
54	STEELTON (P.P.&L.CO.)	
55	STEELTON (BETH.STEEL CO.)	
56	HERSHEY	
57	S. HERSHEY	
58	N.HERSHEY	
59	CENTER CITY	
60	DEVONSHIRE	('95)
61	NOTTINGHAM	

LEGEND

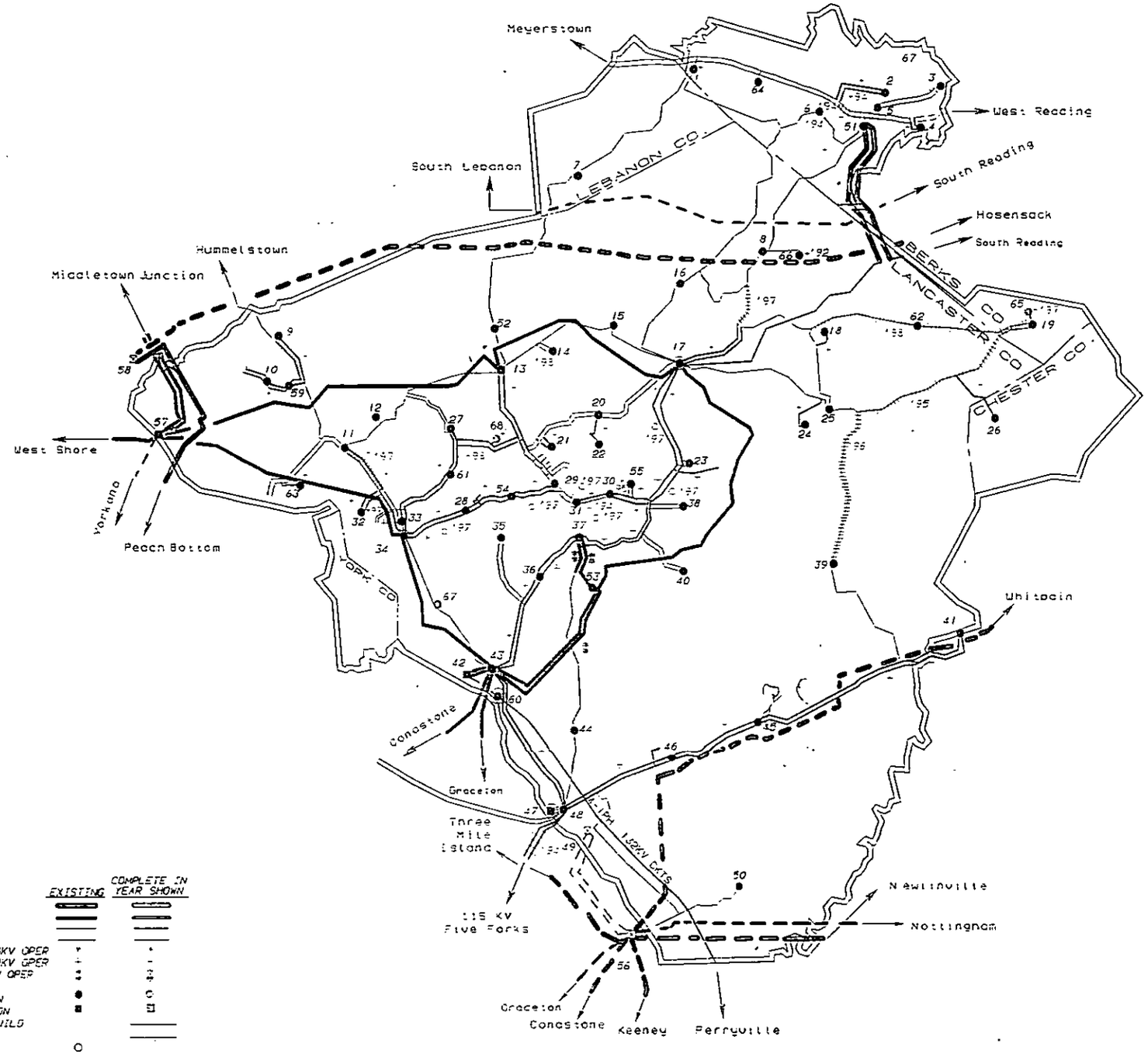
P P & L CO FACILITIES	EXISTING	COMPLETE IN YEAR SHOWN
500KV		
230KV		
138KV		
69KV		
500KV CONSTR.-230KV OPER	•	•
138KV CONSTR.-69KV OPER	–	–
SUBSTATION OR SWITCHING STATION	●	○
GENERATING STATION	■	□
RENIZE OR REBUILD		
REMOVAL		
COMMUNITIES	C	
CONVERT TO 138KV OPERATION		c
CONVERT TO 500KV OPERATION		C
OTHER UTILITIES	Ⓥ Ⓧ	Ⓥ Ⓧ
NON-UTILITY GENERATION	G	G

DEVELOPMENT OF POWER SUPPLY
EXISTING AND PLANNED THRU 1998

HARRISBURG DIVISION

PENNSYLVANIA POWER & LIGHT CO.
SYSTEM PLANNING DEPARTMENT

LD-3006



STATIONS

1	LAVINO	
2	STATE HILL	
3	WYOMISSING	
4	SHILLINGTON	
5	SPRING	
6	WERNERSVILLE	
7	HEIDELBERG	
8	COCALICO	
9	EAST ELIZABETHTOWN	
10	ELIZABETHTOWN	
11	DONEGAL	
12	MT. JOY	
13	SOUTH MANHEIM	
14	LITITZ	
15	WARWICK	
16	LINCOLN	
17	SOUTH AKRON	(96) (97)
18	TERRE HILL	
19	MORGANTOWN	
20	NEFFSVILLE	
21	EAST PETERSBURG	
22	ROSEVILLE	
23	LEOLA	
24	WEST NEW HOLLAND	
25	EARL	
26	HONEYBROOK	
27	LANDISVILLE	
28	DONERVILLE	
29	DILLERVILLE	
30	EAST LANCASTER	
31	PRINCE	
32	NORTH COLUMBIA	
33	HEMPFIELD	
34	WEST HEMPFIELD	(96)
35	WEST LANCASTER	
36	MILLERSVILLE	
37	ENGLESIDE	
38	GREENLAND	
39	KINZER	
40	STRASBURG	
41	ATGLEN	
42	SAFE HARBOR	
43	MANOR	
44	MT. NEBO	
45	QUARRYVILLE	
46	BUCK	
47	HOLTWOOD	(94)
48	FACE ROCK	(94)
49	MUDDY RUN	
50	WAKEFIELD	
51	BERKS	
52	NORTH MANHEIM	
53	WEST WILLOW	
54	ROHRERSTOWN	
55	NORTH BRIDGEPORT	
56	PEACH BOTTOM	
57	BRUNNER ISLAND	
58	THREE MILE ISLAND	
59	RHEEMS	
60	CONESTOGA	(93)
61	SILVER SPRING	
62	BRECKNOCK	
63	MARIETTA	
64	ROBESONIA	
65	NEW MORGAN	'97)
66	REAMSTOWN	
67	LETORT	(94)
68	MCGOVERNVILLE	98

LEGEND

P. P. & L. CO. FACILITIES	EXISTING	COMPLETE IN YEAR SHOWN
500KV		
230KV		
138KV		
69KV		
500KV CONSTR -230KV OPER		
138KV CONSTR -69KV OPER		
230KV CONSTR -69KV OPER		
SUBSTATION OR		
SWITCHING STATION		
GENERATING STATION		
MODERNIZE OR REBUILD		
REMOVAL		
COMMUNITIES		
CONVERT TO 138KV OPERATION		
CONVERT TO 500KV OPERATION		
OTHER UTILITIES		
NON-UTILITY GENERATION		

DEVELOPMENT OF POWER SUPPLY
EXISTING AND PLANNED THRU 1998

LANCASTER DIVISION

PENNSYLVANIA POWER & LIGHT CO.
SYSTEM PLANNING DEPARTMENT

LD-3007

DOCUMENT
FOLDER

PENNSYLVANIA POWER & LIGHT COMPANY

Exhibit DAK 2
1995-96 Construction Budget

DOCKETED
JUN 13 1995

Witness: Douglas A. Krall
Docket No. R-00943271

5/26/95 Ltr

RECEIVED
JUN 01 1995
PUBLIC UTILITY COMMISSION
SECRETARY BUREAU

1995-1996 CONSTRUCTION BUDGET

PENNSYLVANIA POWER & LIGHT COMPANY

OCTOBER 1994

1995-1996 CONSTRUCTION BUDGET
TABLE OF CONTENTS

PAGE

CHAPTER 1

INTRODUCTION

INTRODUCTION

A. GENERAL DISCUSSION

This report:

- Presents a discussion of the 1995 and 1996 Construction Budgets, the five- and ten-year construction programs and the major factors that influenced their development.

- Provides an estimate of exposure to additional capital financing. This exposure includes specific expenditures which are highly uncertain.

The purpose of the Construction Budget and its related cost data is to identify the capital requirements to support existing Company facilities and necessary expansions, and to establish a basis for financial and manpower planning. Further, the construction budget is a major document in developing future test year plant additions and retirements for rate case purposes. It also provides a process for early identification of projects which facilitates an orderly process of engineering, construction and long-term system development.

The recommended construction program is based on the loads resulting from PP&L's Least Cost Plan (LCP) filed with the Pennsylvania PUC May 1, and reflects an average annual compounded peak load growth rate of 1.8% for the period 1994 to 2004. With these loads, there is no need for new generating capacity and associated expenditures within the next five years. An analysis is included of the effect of higher loads than those resulting from the LCP.

The construction budget is based in large measure on a set of fundamental planning guidelines known as the Reliability Principles and Practices. These principles are intended to encourage imaginative solutions to planning problems while assuring a degree of uniformity in planning decisions and providing a balance between cost of service and reliability. These principles evolved over many years and were committed to writing in the late 1960's. They are constantly under review to determine needed refinements which reflect current thinking on load supply philosophies and recent advances in technology. A review of the Electrical Planning Principles and Practices was completed in 1988. Principles and Practices for Existing Fossil and Hydro Generating Stations are currently under review.

As business strategies continue to evolve in anticipation of a more competitive future, one of PP&L's objectives continues to be to maintain a stable, competitive price for our service. A key element in accomplishing this objective is a program of cost effective management which is applied to operating, payroll and capital budgets. The intent of this program is to assure that these budgets address the operational strategies and objectives of the Company and, at the same time, provide a mechanism to revise those strategies and objectives should their "cost" be inconsistent with financial and rate-making strategies.

The explanatory material included herein describes a Construction Program which, consistent with operational strategies, seeks to maintain the historically good performance of our existing facilities, and, also make additions and modifications where it is cost effective to do so. In support of financial objectives, however, certain projects were deferred beyond their desired in-service date. Projects which have

been deferred fall into one of the following general categories:

1. Performance improvements at fossil and hydro generating stations.
2. Transmission and distribution improvements which are not required to meet customer loads but could involve some exposures to increased interruption frequency and restoration times in the event of an equipment failure or maintenance outage.
3. Replacements in all categories where timing is a matter of judgment and deferral is judged not to incur significant risk.
4. Selected building-type projects in accordance with the 10-year General Buildings Program

CHAPTER 2

SUMMARY

CHAPTER 2
1995-1996 CONSTRUCTION BUDGET SUMMARY

A. GENERAL DISCUSSION

The Construction Budget provides for expenditures (excluding nuclear fuel purchases) of $386.9 million in 1995, and $400.8 million in 1996. Requirements of $2057.3 million are anticipated for the five-year period from 1995 through 1999. The dollar expenditures for the 1995-1999 five-year period are shown in Table 2-1.

Table 2-2 shows a comparison of estimates by budget category to those prepared in October 1993, for the 1995-2004 ten-year period.

A comparison of the 1995 budget estimate of $386.9 million with the estimate prepared in October 1993 of $397.8 million, shows an decrease of $10.9 million. This decrease is discussed by category in each of the following chapters. Nuclear fuel purchases are included in Tables 2-1 and 2-2 for information purposes.

All data have been adjusted to reflect the effect of escalation. The rate used to escalate expenditures beyond 1995 was 3.0% per year through 2004. This rate is based on the 1994-1995 Corporate Planning Assumptions issued in July, 1994. Shown below is the estimate of escalation included in the 1995-1999 Construction Program.

	$ MILLION ESCALATION INCLUDED ABOVE 1995 PRICE LEVEL
1995	-
1996	12
1997	27
1998	41
1999	35

The detailed financial data for the 1995 and 1996 Capital Construction Budgets are included as follows:

1995 Construction Budget

Table	2-3	Summary - Major Projects
	2-4	Summary - Construction Budget
	2-5	Expenditures By Class of Property
	2-6	Additions and Retirements to Plant

1996 Construction Budget

Table	2-7	Summary - Major Projects
	2-8	Summary - Construction Budget
	2-9	Expenditures By Class of Property
	2-10	Additions and Retirements to Plant

Tables 2-11 and 2-12 show the committed funds associated with each of the annual construction budgets. These estimates reflect funds necessary to complete the projects started prior to and during the respective budget years.

Listings of the individual projects included in the 1995 and 1996 Budgets are shown as Appendix A and B respectively. Included in Appendix C are the bulk power system map and seven regional maps. Each of these show the existing and planned bulk power and regional supply facilities and area substations through 1998.

In addition to the capital construction program of approximately $2057.3 million for the 1995-1999 period, there is a potential for additional capital expenditures not included in the base capital plan. This is discussed in detail in Chapter 11 and listed in Table 11-1 on Page 11-2.

TABLE 2-1
1995-1999 CONSTRUCTION PROGRAM
ESTIMATED CONSTRUCTION EXPENDITURES
$ MILLIONS (ESCALATED)

Budget Category	1995	1996	1997	1998	1999	TOTAL 1995-1999	% OF TOTAL
New Generation	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Existing Generation Nuclear	49.5	45.0	42.8	40.5	36.0	213.8	10.4
Existing Generation Fossil and Hydro	105.1	116.6	214.5	241.1	90.7	768.0	37.3
Bulk Power	9.8	7.0	9.5	11.1	8.1	45.5	2.2
Regional Supply	36.6	36.0	37.8	46.0	41.1	197.5	9.6
Area Supply	48.3	46.6	47.2	50.1	47.2	239.4	11.6
Revenue Work	80.0	80.0	80.0	80.0	80.0	400.0	19.4
Sites and R/W	0.7	0.7	0.7	0.8	0.8	3.7	0.2
Buildings	9.9	6.3	7.3	2.0	2.0	27.5	1.3
Other (1)	47.0	62.6	38.0	6.9	7.4	161.9	8.0
Total New Construction	386.9	400.8	477.8	478.5	313.3	2,057.3	100.0
Nuclear Fuel Purchases	52.1	77.2	47.2	61.5	88.7	326.7	
Grand Total	439.0	478.0	525.0	540.0	402.0	2,384.0	

(1) Includes rounding adjustment.

OCT. 1994 ESTIMATE
OCT. 1993 ESTIMATE

TABLE 2-2
1995-2004 CONSTRUCTION PROGRAM
ESTIMATED ANNUAL EXPENDITURES
$ MILLIONS (ESCALATED)

Budget Category	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	TOTAL 1995-2004
New Generation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Existing Generation Nuclear	49.5	45.0	42.8	40.5	36.0	27.0	27.0	27.0	27.0	27.0	348.8
	50.0	45.0	46.8	46.8	50.1	51.8	53.6	55.5	57.4	59.4	516.4
Existing Generation Fossil and Hydro	105.1	116.6	214.5	241.1	90.7	90.0	80.0	80.0	80.0	80.0	1,178.0
	116.9	139.9	188.5	164.8	224.5	193.3	131.6	75.0	99.2	76.1	1,409.8
Bulk Power	9.8	7.0	9.5	11.1	8.1	8.3	8.6	8.9	9.2	9.5	90.0
	13.6	10.8	8.1	8.5	8.8	9.1	9.4	9.8	10.1	10.4	98.6
Regional Supply	36.6	36.0	37.8	46.0	41.1	42.3	43.6	44.9	46.3	47.9	422.5
	38.8	50.0	49.6	53.2	55.1	57.0	59.0	61.1	63.2	64.5	551.5
Area Supply	48.3	46.6	47.2	50.1	47.2	48.7	50.2	51.7	53.3	54.9	498.2
	53.9	52.5	38.9	40.9	45.0	46.6	48.2	49.9	51.6	52.6	480.1
Revenue Work	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0	800.0
	86.8	89.0	89.0	85.0	80.0	80.0	80.0	80.0	80.0	80.0	829.8
Sites and R/W	0.7	0.7	0.7	0.8	0.8	0.9	0.9	0.9	1.0	1.0	8.4
	0.7	0.7	0.8	0.8	0.9	0.9	0.9	1.0	1.0	1.0	8.7
Buildings	9.9	6.3	7.3	2.0	2.0	2.0	---	---	---	---	29.5
	3.9	5.4	1.5	1.6	1.6	1.3	---	---	---	---	15.3
Other	47.0	62.6	38.0	6.9	7.4	6.6	7.7	7.1	7.8	7.8	198.9
	33.0	29.1	11.6	7.8	7.7	8.7	8.5	8.5	8.8	9.0	132.7
Total New Construction	386.9	400.8	477.8	478.5	313.3	305.8	298.0	300.5	304.6	308.1	3,574.3
	397.6	422.4	434.8	409.4	473.7	448.7	391.2	340.8	371.3	353.0	4,042.9
Nuclear Fuel Purchases	52.1	77.2	47.2	61.5	88.7	49.2	65.0	91.5	54.4	71.9	658.7
	55.4	80.6	48.2	63.6	92.3	50.3	66.8	93.2	55.7	74.0	680.1
Grand Total	439.0	478.0	525.0	540.0	402.0	355.0	363.0	392.0	359.0	380.0	
	453.0	503.0	483.0	473.0	566.0	499.0	458.0	434.0	427.0	427.0	
Cumulative Grand Total	439.0	917.0	1,442.0	1,982.0	2,384.0	2,739.0	3,102.0	3,494.0	3,853.0	4,233.0	
	453.0	956.0	1,439.0	1,912.0	2,478.0	2,977.0	3,435.0	3,869.0	4,296.0	4,723.0	

TABLE 2-3
1995 SUMMARY - MAJOR PROJECTS

Major Projects - Four Million Dollars or More in 1995	Cost-Thousands 1995 Budget Year	Project Total
Susquehanna SES - Unit #2 - Replace Plant Computer System	4,590	9,829
Brunner Island SES - Unit #2 - Replace Horizontal Reheater and Superheater and Economizer	14,780	15,980
Brunner Island SES - Dry Fly Ash Conversion	9,000	26,061
Montour SES - Unit #1 - Replace Control System	5,803	6,946
Montour SES - Unit #1 - Install Low NOx Burners	8,470	15,970
Holtwood HES - Install Fish Passage Facilities	6,800	20,840
South Akron 230-138 KV Substation	4,438	12,322
Division Operations Department - "SIGHT" Project	30,500	103,900
Nuclear Department - "NIMS" Project	9,300	24,800
Total Major Projects	93,681	236,648

TABLE 2-4
1995 SUMMARY - CONSTRUCTION BUDGET
THOUSANDS OF DOLLARS - ESCALATED

	1995 Budget Year
Major Projects - Subtotal from Table 2-3	93,681
Production - Additions, Replacements and Improvements to Generating Facilities	99,741
Transmission - Additions, Replacements and Improvements to Transmission Facilities	10,130
Distribution - Additions, Replacements and Improvements to Distribution Facilities	79,991
Revenue - Supply Additional Residential, Commercial, Industrial and Street Lighting Loads, Including Transformers and Meters	76,090
Buildings	9,960
General	4,255
Total New Construction	373,848
Net Removal Costs	12,963
Total Construction Including Removals	386,811
Nuclear Fuel Purchases	52,100
Grand Total	438,911

TABLE 2-5
1995 CONSTRUCTION BUDGET *
BY CLASS OF PROPERTY
THOUSANDS OF DOLLARS-ESCALATED

Class of Property	Prior to Budget Year	During Budget Year	After Budget Year	Total
Production				
Nuclear	53,299	49,500	43,959	146,758
Fossil/Hydro	87,460	105,452	429,171	622,083
Sub-Total	140,759	154,952	473,130	768,841
Transmission	11,834	10,320	11,411	33,565
Distribution	36,008	167,424	138,775	342,207
General	23,070	54,115	96,070	173,255
Sub-Total	211,671	386,811	719,386	1,317,868
Nuclear Fuel		52,100	274,600	326,700
TOTAL	211,671	438,911	993,986	1,644,568

* Includes Removal Costs.

TABLE 2-6
1995 ESTIMATE OF ADDITIONS AND RETIREMENTS
FROM PLANT DURING BUDGET YEAR
THOUSANDS OF DOLLARS

Class of Property		Additions To Plant *	Retirements
Production			
Nuclear		54,800	6,000
Fossil/Hydro		146,890	8,735
	Sub-Total	201,690	14,735
Transmission		19,690	1,790
Distribution		152,800	19,160
General		18,140	330
	TOTAL	392,320	36,015

* Excludes Removal and Salvage Costs.

TABLE 2-7
1996 SUMMARY - MAJOR PROJECTS

Major Projects - Four Million Dollars or More in 1996	Cost-Thousands 1996 Budget Year	Project Total
Susquehanna SES - Spent Fuel Storage Additions	6,026	11,290
Susquehanna SES - Replace Plant Computer System	4,728	10,279
Susquehanna SES - Unit #1 - Reactor Recirc. Pump Shaft Replacement	5,122	7,378
Martins Creek SES - Unit #3 - Convert to Gas Co-Firing	14,860	15,786
Sunbury SES - Add Dry Fly Ash Handling System	14,900	18,072
Sunbury SES - Add Waste Water Treatment	7,245	7,945
Montour SES - Unit #2 - Replace Control System	4,886	5,922
Montour SES - Unit #1 - Install Flue Gas Desulfurization	11,206	327,883
Holtwood HES - Install Fish Passage Facilities	12,340	20,840
West Hempfield 230-138 KV Substation	6,629	10,548
South Akron 230-138 KV Substation	4,996	12,327
Division Operations Department - "SIGHT" Project	46,800	103,900
Nuclear Department - "NIMS" Project	8,700	24,800
Total Major Projects	148,438	576,970

TABLE 2-8
1996 SUMMARY - CONSTRUCTION BUDGET
THOUSANDS OF DOLLARS - ESCALATED

	1996 Budget Year
Major Projects - Subtotal from Table 2-7	148,438
Production - Additions, Replacements and Improvements to Generating Facilities	74,716
Transmission - Additions, Replacements and Improvements to Transmission Facilities	7,499
Distribution - Additions, Replacements and Improvements to Distribution Facilities	69,445
Revenue - Supply Additional Residential, Commercial, Industrial and Street Lighting Loads, Including Transformers and Meters	76,800
Buildings	2,835
General	5,812
Total New Construction	385,545
Net Removal Costs	14,809
Total Construction Including Removals	400,354
Nuclear Fuel Purchases	77,200
Grand Total	477,554

TABLE 2-9
1996 CONSTRUCTION BUDGET *
BY CLASS OF PROPERTY
THOUSANDS OF DOLLARS-ESCALATED

Class of Property	Prior to Budget Year	During Budget Year	After Budget Year	Total
Production				
Nuclear	43,374	45,000	16,985	105,359
Fossil/Hydro	25,916	117,217	432,787	575,920
Sub-Total	69,290	162,217	449,772	681,279
Transmission	1,667	7,552	13,701	22,920
Distribution	40,792	165,899	118,910	325,601
General	49,733	64,686	42,767	157,186
Sub-Total	161,482	400,354	625,150	1,186,986
Nuclear Fuel	52,100	77,200	197,400	326,700
TOTAL	213,582	477,554	822,550	1,513,686

* Includes Removal Costs.

TABLE 2-10
1996 ESTIMATE OF ADDITIONS AND RETIREMENTS
FROM PLANT DURING BUDGET YEAR
THOUSANDS OF DOLLARS

Class of Property		* Additions To Plant	Retirements
Production			
Nuclear		19,940	4,020
Fossil/Hydro		81,420	9,480
	Sub-Total	101,360	13,500
Transmission		4,040	370
Distribution		170,760	21,410
General		24,520	300
	TOTAL	300,680	35,580

* Excludes Removal and Salvage Costs.

TABLE 2-11
FUNDS COMMITTED IN 1995 *
THOUSANDS OF DOLLARS-ESCALATED

	Prior To 1995	During 1995	After 1995
Projects started prior to 1995 and completed during 1995	154,678	130,703	
Projects started prior to 1995 and completed after 1995	56,993	103,529	645,971
Projects to be started and completed during 1995		148,674	
Projects to be started in 1995 and completed after 1995		3,905	73,415
TOTAL	211,671	386,811	719,386
		1,106,197	

TABLE 2-12
FUNDS COMMITTED IN 1996 *
THOUSANDS OF DOLLARS-ESCALATED

	Prior To 1996	During 1996	After 1996
Projects started prior to 1996 and completed during 1996	58,465	92,097	
Projects started prior to 1996 and completed after 1996	103,017	135,952	490,706
Projects to be started and completed during 1996		165,804	
Projects to be started in 1996 and completed after 1996		6,501	134,444
TOTAL	161,482	400,354	625,150
		1,025,504	

* Excludes Nuclear Fuel.

B. ENVIRONMENTAL EXPENDITURES

The costs of facilities included in the budget which are attributable to environmental preservation and enhancement for the 1995-1999 period are as follows:

TABLE 2-13
ENVIRONMENTAL EXPENDITURES
$ MILLIONS - ESCALATED

	1995	1996	1997	1998	1999	Total 1995-1999
Air Quality	0.3	0.3	0.0	0.0	0.0	0.6
Water Quality	3.7	10.4	0.9	0.0	0.0	15.0
Solid Waste Disposal	13.7	24.1	4.9	6.7	4.2	53.6
Clean Air Act	19.9	14.2	148.0	194.0	43.5	419.6
Aesthetics	2.0	2.0	2.0	2.0	2.0	10.0
Other	0.5	0.5	0.5	0.5	0.5	2.5
Total 1995-1996 Budget	40.1	51.5	156.3	203.2	50.2	501.3
Total 1994-1995 Budget	54.9	105.3	165.8	145.6	50.0	521.6

The primary reason for the significant decrease in the environmental costs from the 1993-1997 Construction Program is due to the refinement of the compliance plan to meet the Clean Air Amendments, and rescheduling of projects. A more detailed discussion is included in Chapter 5, Existing Generation - Fossil and Hydro.

There are potential capital expenditures in environmental costs identified in Chapter 11 which are not included in Table 2-13.

The environmental expenditures shown in Table 2-13 have been segregated into six

categories. They are:

- The Air Quality category represents costs to maintain facilities at the generating plants to monitor and control emissions to meet existing state and federal regulations.
- The Water Quality category represents costs to build and maintain facilities at the generating plants to meet state and federal regulations for waste and thermal discharge and ground water contamination.
- The Solid Waste category represents costs to build and maintain facilities at the generating plants to permanently store solid wastes such as fly ash, bottom ash, and mill rejects.
- The Clean Air Act category represents costs to add equipment at the generating stations to meet new federal regulations governing sulfur dioxide and nitrous oxide emissions.
- The Aesthetics category represents costs for transmission and distribution facilities which are spent for environmental enhancement. These costs are for substation landscaping to blend with the surroundings, covered overhead conductors, upswept crossarms, and installation of underground facilities.
- The "Other" category is for miscellaneous facilities such as modifications made at the recreation areas or to general properties (service centers, etc.) to comply with environmental regulations.

C. NET REMOVAL COSTS

Net removal costs refer to the removal costs less salvage recovered for capital property that is being retired. The project cost estimates for the 1995-1999 Budgets presented in this report include these net removal costs in the total project estimates.

With the significant amount of equipment replacements at fossil and hydro plants, the potential for large removal costs at Susquehanna SES, and the continuing improvements being made to the electrical system, removal costs have increased to a significant level (actual removal costs less salvage amounted to $21.7 million in 1993).

The Financial Department has requested that these costs be identified separately for budgeting and reporting purposes.

CHAPTER 3

BUDGET DISCUSSION - NEW SUPPLY/DEMAND-SIDE EXPENDITURES

CHAPTER 3
BUDGET DISCUSSION - NEW SUPPLY/DEMAND-SIDE EXPENDITURES

A. OVERVIEW

The objective of system development is to ensure a reliable and economic energy supply for PP&L's customers now and in the future. Developing and maintaining a system that provides a reliable and economic energy supply continues to be a challenge, given the uncertainty in key planning assumptions (such as load growth and fuel prices) and the changing regulatory and economic environment. PP&L's strategy to deal with these uncertainties is to maintain a flexible mix of resource options, balancing supply-side and demand-side options. The optimal use of existing resources will continue to be a priority.

PP&L files a 20-year projection of resource needs, along with the supply-side and demand-side options to meet those needs, with the Pennsylvania Public Utility Commission (PPUC) in May of each year. This is the so called Least Cost Plan (LCP).

The current supply-side and demand-side efforts:

- continue to support the long-term corporate objective to defer the need for additional central station generation into the 21st century.
- recognize that PP&L has sufficient capacity resources to continue with its strategy of bulk power marketing for the 1990s.

PP&L plans no new generating facilities in the Construction Budget. However, PP&L has several capital projects under way that will result in improved efficiency and output of existing generating units. These projects are the uprate of the Susquehanna SES unit 1 (the uprate of Susquehanna SES Unit 2 was completed in June 1994) and the

rebuild of the Sunbury Unit 1 steam turbine. PP&L is moving ahead with the regulatory approval process and technical analyses of converting the two oil-fired generating units at Martins Creek plant to allow use of gas for up to 50% of capacity on an interruptible basis.

Demand-side management (DSM) is an important element of PP&L's strategy to meet customer electric energy needs. DSM includes conservation and load management programs. In March 1994, PP&L filed a comprehensive DSM plan with the PPUC. The plan included programs encompassing industrial, commercial, and residential customers. PP&L's resource planning process helps ensure that the most appropriate DSM programs are pursued. PP&L will continue to evaluate DSM programs and make changes as required.

There are capital expenditures included in the Construction Budget specifically for the DSM program on area lighting. However, most programs are currently in the Operating Budget. Other individual projects in the Capital Budget contribute to DSM efforts by improving efficiency in energy use in PP&L system facilities as a result of equipment upgrade or replacement for other reasons (for example, the replacement of failed transformers with low-loss transformers because that option is economically justified).

The optimal use of existing resources (including generating capacity and transmission capability) will involve meeting system needs along with bulk power marketing to others. Each of these efforts must recognize the trend in the utility industry toward a more competitive market. For instance, PP&L participates in other utility requests for proposals (RFP) for capacity and energy when it is in PP&L's best interest.

B. CURRENT EFFORTS

The following describe PP&L's current supply-side and demand-side efforts in support of long-term objectives and the current resource utilization efforts.

1. Supply-Side Efforts

Although PP&L does not have plans for new generating facilities in the budget, PP&L has several projects under way which are intended to maintain or improve the capability of existing generating units, improve their availability, or increase the economic incentive to dispatch their generation.

a) Susquehanna SES

PP&L has completed studies that show it is economically and technically feasible to uprate these units to increase the output by about 5 percent. Based on these studies, PP&L has notified the Nuclear Regulatory Commission of the Company's intent to proceed with the development of a power uprate license amendment submittal. The uprate of Unit 2 was completed in mid-1994. The uprate for Unit 1 will be complete in mid-1995. PP&L's share of the uprate for both units totals 90 MW. PP&L's share of the costs are estimated to be $40 million.

b) Sunbury SES

Sunbury Unit 1 steam turbine components, which are in excess of 40 years of age and deteriorated, are being replaced to eliminate risk of a failure of these components and resultant lengthy outage. The total cost of the Unit 1 turbine project is estimated to be approximately $12 million. Similar work on Unit 2 has recently been completed.

c) Martins Creek Units 3 and 4 Co-fire

PP&L's analyses have indicated that modifying the two oil-fired generating units at the Martins Creek plant to burn both oil and natural gas will offer economic benefits, benefits of diversity and flexibility in fuel supply, and environmental advantages.

Natural gas at the well-head, and natural gas transportation are available at a cost that is lower then the dellivered cost of oil in many months of the year. This gives natural gas a competitive price advantage over oil during that time. Additionally, PP&L is in a relatively favorable position since it can receive gas transportation services from three interstate pipelines, as well as one local distribution company. Plans are to provide capability for gas co-firing up to 50% on an interruptible basis. Providing greater than 50% of the heat input from gas would require costly modifications of heat transfer surfaces which make that option less economically attractive.

While moving ahead with the regulatory approval process that would allow gas co-firing, PP&L is also working toward completion of technical analyses related to gas supply and equipment for the conversion. These activities are proceeding such that the modification of Unit 3 is expected to be complete in March 1996, and Unit 4 in December 1996. Capital costs associated with both the boiler modifications and required in-plant distribution piping for 50% gas co-firing are estimated to be about $28 million.

2. Demand-Side Efforts

DSM represents is an element of PP&L's strategy to meet customer electric

energy needs. DSM helps achieve long-term corporate objectives to maintain base rate stability, provide a fair return on common equity, and defer the need for additional central station generation.

PP&L filed a comprehensive DSM plan with the PPUC in March 1994 that *included programs encompassing industrial, commercial and residential* customers. PP&L's activities in DSM continue to evolve as existing programs are monitored, new programs are developed, and market research data is gathered.

PP&L's DSM objectives will continue to be to design and implement programs that: promote the profitability and comfort of our customers by meeting their electric energy needs, increase sales (within the overall policy objectives of the PPUC to manage demand), defer more costly supply-side resources, and increase both supply and end-use efficiencies.

PP&L's DSM plan affects the Company's budgets, particularly the Operating Budget. The continuation of existing programs is already reflected in the Company's budgets. This budget does not reflect allocations for expansion of new programs beyond the pilot stage.

3. Resource Utilization Efforts

One avenue for PP&L to optimize use of its resources is to pursue various utility RFPs for capacity and/or energy. PP&L is currently evaluating utility RFPs as opportunities become available. A Bulk Power Marketing team, consisting of Marketing, System Operating and System Planning personnel regularly visits regional utilities to determine potential bulk power marketing opportunities, both conventional and unconventional. This team has participated in other utility solicitations for capacity and energy.

C. PLANNING BASIS

"Base Case" conditions for this budget review are PP&L's 1994 LCP loads and other current assumptions. The LCP loads reflect an overall peak load growth rate of 1.8% for the period 1994 to 2004. Other key assumptions include:

- The PJM reserve requirement will be 22% through May 1994, 21.5% through May 1995, 21% through May 1996, 20.5% through May 1997 and 20% thereafter.

- Traditional and non-traditional bulk power sales that affect either PP&L's capacity or obligation will remain at current contract levels, unless specific changes are known or planned.

- The output of NUG within PP&L service area will remain at the current level of 504 MW.

- The Clean Air Act will not significantly affect available capacity resources in the 1990s. By the year 2005, PP&L's installed capacity will be derated by 53 MW as a result of SO2 scrubber energy requirements.

The discussion that follows provides a review of:

- PP&L's existing generating capability, including NUG output.
- DSM programs.
- PP&L's Resources/Obligations (R/O) for the LCP loads and for the LCP High Loads and LCP Low Loads as exposure cases.

D. PP&L's EXISTING GENERATOR CAPABILITY (INCLUDING NUG OUTPUT)

Existing PP&L generation capability for the summer and winter is shown in Table 3-1. Included in the summary is 504 MW of NUG output.

E. PP&L's EXISTING DEMAND-SIDE MANAGEMENT

DSM is both a factor in the resource planning process and an opportunity to respond to customers' electric energy needs.

A managed growth strategy is an important part of PP&L's current DSM efforts to optimize use of our existing resources while meeting our customers' needs. PP&L's DSM programs emphasize efficient use of electrical energy. These programs promote energy audits, off-peak heating systems, high efficiency heat pumps, and industrial and commercial energy efficiency improvements.

PP&L's DSM resources also include a block of interruptible load which provides peak load reduction during system emergencies. PP&L has established tariffs for interruptible load customers, whereby PP&L may interrupt all or part of their load for system reliability or for economic conditions. Tables 3-2, 3-3, and 3-4 include an estimated 229 MW of interruptible load.

Under PJM procedures, PP&L maximizes the benefits available from interruptible load by allowing PJM to coordinate the interruption of these customers during capacity emergencies. The PJM procedure allows PP&L to claim the interruptible load plus an additional approximately 20% as a capacity resource to reflect the company reserves that otherwise would have been needed.

F. PP&L's RESOURCES/OBLIGATIONS

Considerations that influence future R/O are discussed below and are integrated in the R/O summaries that are presented later.

1. Use of Existing Capacity

PP&L currently has no current plans to retire any of its existing generating

units for the period 1994-2013, although this could change as the utility industry environment changes. Continuing the operation of PP&L's generating plants can be preferable to their retirement and replacement with new generating capacity. PP&L has projects under way that are intended to improve or avoid reductions in the availability and efficiency through the addition of new equipment. Projects also are under way to replace old and deteriorated equipment to restore performance or avoid performance degradation. As discussed in Section B, two such projects are the Susquehanna SES uprate and Sunbury turbine rebuild.

2. Load Growth

- LCP Loads

  The LCP loads reflect the expected level of customer sales and peak load growth over the 20 year planning horizon.

- Exposure Case - LCP High Loads 2.4% Peak Load Growth

  This case has been developed as an alternate to the LCP loads and is presented to illustrate the impact of peak load growth that exceeds current expectations. The high loads exposure case assumptions include increased market share, higher customer average use, and higher service area population growth. This exposure case assumes that the annual growth rate will average 0.6% (55 MW/year) higher than the LCP base case growth rate.

- Exposure Case - LCP Low Loads 1.0% Peak Load Growth

  This case has been developed as an alternate to the LCP loads and is presented to illustrate the impact of peak load growth that does not meet current expectations. The low loads exposure case assumptions include loss of market share, lower customer average use, and a slower service

area population growth. This exposure case assumes that the annual growth rate will average 0.8% (55 MW/year) less than the LCP base case growth rate.

For reference, growth rates associated with the projections noted above are summarized in the table below:

Peak Growth Rates

	1994-2004	
	%	MW/Year
LCP	1.8	125
High Loads Exposure	2.4	180
Low Loads Exposure	1.0	70

3. PP&L's Obligation to PJM

The PJM pool's installed capacity requirement is apportioned among PJM member companies according to rules and procedures prescribed within the PJM Agreement based on the PJM Reserve Requirements of between 20%-22%.

4. Bulk Power Sales (Traditional) and Purchases

In addition to meeting the needs of PP&L's customers, PP&L is marketing to others to the extent PP&L has capacity and/or energy available.

PP&L's net resources reflect PP&L transactions (capacity and energy) with Atlantic Electric (AE), Jersey Central Power & Light (JCP&L), Baltimore Gas & Electric (BG&E), and NUGs.

a) Atlantic Electric (AE) Sale

In June 1983, PP&L and AE signed a contract under which AE agreed

to purchase approximately 125 MW (129 MW based on winter ratings) of PP&L's coal-fired capacity from October 1991 through September 2000.

b) Jersey Central Power & Light (JCP&L) Sale

In 1985, PP&L entered into a long-term sales agreement with JCP&L, a General Public Utilities (GPU) subsidiary. Under the terms of this sale, PP&L provides JCP&L with 945 MW (winter ratings) of PP&L's electrical generating capacity and related energy through the end of 1995. This sale involves an equal percentage entitlement to capacity and associated energy from all generating units in which PP&L has an ownership or lease interest. After 1995, the sale decreases uniformly (at 20% per year) until the expiration of the contract in December 1999.

The return of this sale to PP&L presents several opportunities because these resources will be available for customer use and/or new bulk power sales.

c) Baltimore Gas & Electric (BG&E) Sale

In 1988, BG&E agreed to purchase, for 10 years commencing in October 1991, the 5.94% (currently 129 MW summer rating) portion of SSES previously sold to AE. Pursuant to this agreement and a 1989 supplement, BG&E has the option to purchase capacity credits from PP&L. Information regarding capacity credits sales is provided in Section F5.

d) NUG Purchase

PP&L currently has 504 MW of NUG output nominated as a capacity

resource for PJM installed capacity accounting purposes. The NUG contracts are of various lengths with the longest being about 20 years. Some contracts begin to expire in four to eight years. This may have an effect on PP&L's need for new capacity. For planning purposes, it is assumed that the contracts will be extended.

5. Other Sales - Non-Traditional

PP&L also enters into sale arrangements that reflect capacity needs as well as energy needs. To meet these sales arrangements, PP&L has undertaken unique forms of marketing its resources beyond current needs. PP&L is well positioned in both type and amount of bulk power resources to continue marketing into the early part of the next century.

PP&L has signed contracts and continues to negotiate new contracts for the sale of various system entitlements. These contracts can generally be classified into the following types:

a) Capacity Credits

Capacity credit sales allow a PJM company, which might otherwise be short of its capacity obligation to PJM, to claim the selling company's capacity credits to contribute toward satisfying the buying company's capacity obligation. The capacity credits sold are from the total system capacity, not from specific generating units, and do not entitle the buying company to any energy and are therefore not reflected as a reduction in PP&L's net resources. Instead, capacity credit sales are reflected as additional PP&L obligations.

- A sale of this type was packaged with the Susquehanna capacity and energy sale to BG&E (discussed earlier). The sale allows BG&E

to take up to 275 MW of capacity credits October 1991 through May 2001. Currently arranged firm purchases include 50 MW from June 1994 through May 1995 and 183 MW from June 1995 through May 1996.

- PP&L entered into an agreement with PEPCO in 1994 for the sale of 147 MW of capacity credits from June 1994 through May 1995.

- PP&L entered into an agreement with GPU in December 1989 for the sale of NUG energy plus 390 MW of capacity credits for June 1991 through May 1995.

- In addition, agreements also signed in 1991 with BG&E, GPU and AE and in 1994 with PEPCO provide for periodic capacity credit sales as mutually agreed upon.

b) Reservations of Output Sales

A market outside of PJM has developed under which non-PJM companies reserve generating plant output and occasionally purchase the output on call. Buyers pay a non-refundable reservation charge for the available output and also pay PP&L's cost for any output that is purchased including lost PJM savings. PP&L retains the right to recall the output when needed for PJM emergencies. Such agreements were signed with a number of entities outside PJM for short-term purchases. Because the output available through these transactions is recallable, it is not reflected as a reduction to resources.

c) Transmission Entitlements

Another type of sale involves PP&L's share of the right to use the PJM

transmission system for importing economical energy from systems to the west of PJM. PP&L's share of this transmission capability can be sold at a price benefiting both the buyer and seller. This transmission capability is being offered in whole or part to all PJM companies at monthly auctions or through two-party agreements. Such sales have no effect on PP&L's R/O.

The maximum sales that can result from these arrangements is dependent, in part, on the continuing needs of PJM companies and companies external to PJM and, in part, on the actions of other utilities that may have capacity and energy available for sale.

6. Resources/Obligations - Charts/Tables

The charts (Charts 3-1, 3-2, and 3-3) and tables (Tables 3-2, 3-3, and 3-4) at the end of this chapter provide R/O details for the LCP Loads, High Loads and Low Loads cases as previously discussed.

The charts provide a graphical representation of PP&L's R/O for the 1994 to 2004 time period. They also indicate the need for and timing of new resources and opportunities for bulk power transactions. The two-page summary tables show PP&L's R/O for the 1994 to 2013 period.

For ease of comparison, a combination chart (Chart 3-4) shows PP&L's R/O for each of the three cases graphed side-by-side.

a) R/O Summary - LCP Loads

Table 3-2 and Chart 3-1 show PP&L's R/O Summary based on the June 1994 LCP loads. Net resources reflect sales and purchases of capacity and energy arrangements with AE, BG&E and JCP&L; NUG output, and

interruptible load. PP&L's total obligations include PP&L's obligation to PJM and capacity credit sales.

This base case indicates that PP&L does not have a need for additional capacity until 2008. PP&L has sufficient resources available to make additional bulk power sales in most years and to have a margin available for higher-than-forecast load growth.

b) R/O Summary - LCP High Loads Peak Growth Exposure Case

Table 3-3 and Chart 3-2 show PP&L's R/O Summary based on the LCP High Loads Peak Growth projections previously described.

As capacity returns from the various sales, a surplus between 510 MW and 260 MW is projected from 1995 to 2002. However, beginning in 2004, it is projected that PP&L has an exposure to a long-term deficiency.

c) R/O Summary - LCP Low Loads Peak Growth Exposure Case

Table 3-4 and Chart 3-3 show PP&L's R/O Summary based on the LCP Low Loads Peak Growth projections previously described.

It is projected that PP&L has a significant surplus of capacity through 2013.

d) Other Exposures

BG&E Capacity Credit Sale -- PP&L has contracted to provide up to 275 MW of capacity credits to BG&E through May 2001 at a price of about 85% of the PJM installed capacity rate. Because BG&E is not required to firm up its required capacity credit purchases until two years

in advance of a planning year, PP&L must project BG&E's needs and the availability and cost of capacity credits from others to assess PP&L's resources. The R/O cases assume BG&E will not purchase any of the 275 MW of capacity credits during the planning period 1996-2000 because the contract price is above the current market price.. This estimated amount of BG&E's need is a function of BG&E's anticipated peak load growth and performance of its nuclear plant, Calvert Cliffs, as well as the availability of other economic resources in the pool. There is an exposure that BG&E could require some of the 275 MW of capacity credits if the peak load growth is higher than expected, the value of capacity credits increases, or Calvert Cliffs does not perform as expected. PP&L's available resources for PJM installed capacity accounting would decrease by the amount of capacity credits BG&E requires. The amount of capacity credits BG&E elects to take from PP&L will be a function of their need and the availability and price of capacity from others.

NUG -- There is an exposure that a few NUGs on the PP&L system face an uncertain financial future. In addition, as the NUG contracts expire, there is an exposure that some NUG may not renew contracts with PP&L. A NUG failure and/or contract termination would directly affect PP&L resources.

TABLE 3-1

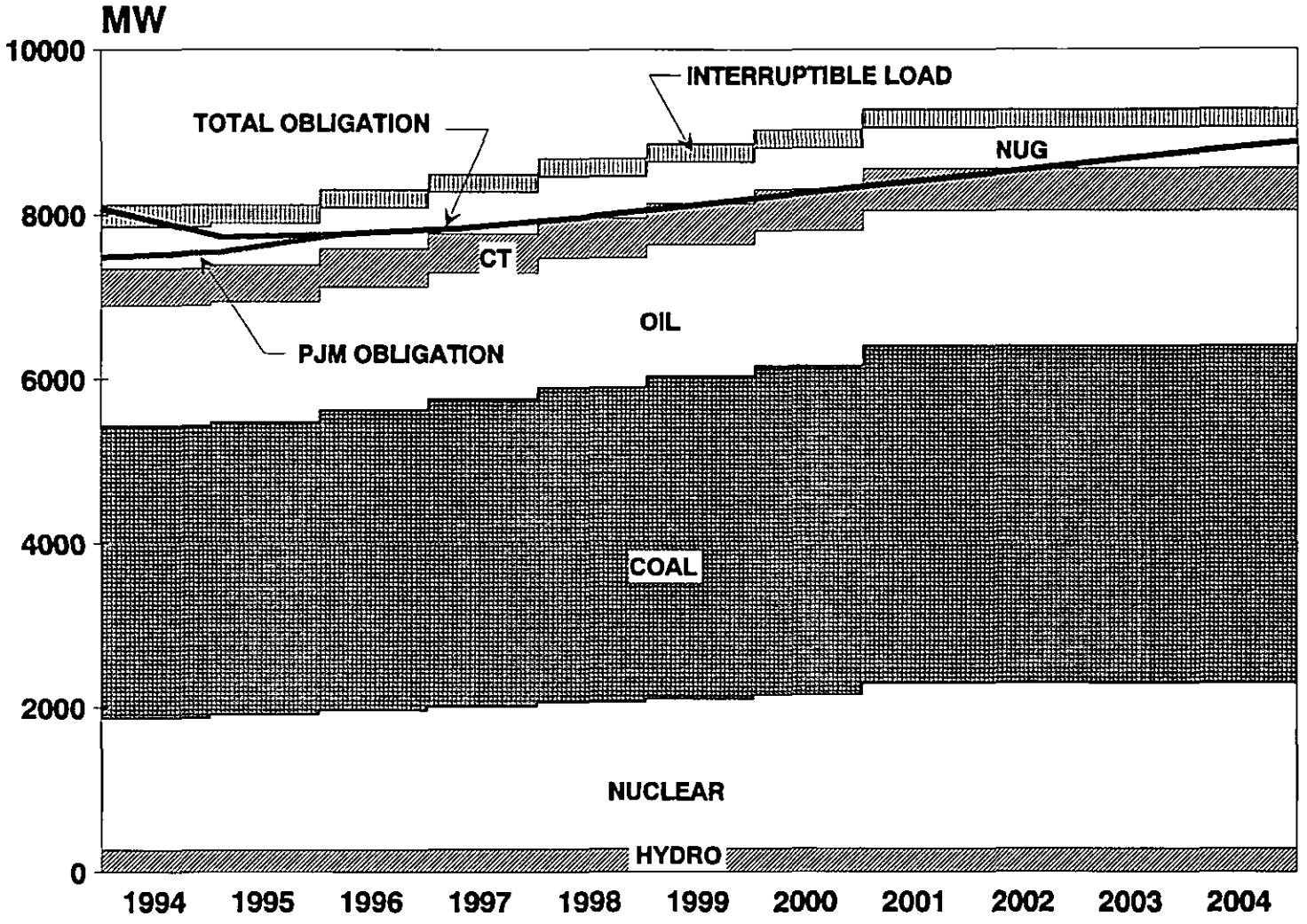
PENNSYLVANIA POWER & LIGHT COMPANY
GENERATION CAPABILITY AS OF OCTOBER 1994(1)
NET MW

	Station		Net Capability -- MW Summer	Winter
Hydro	1.	Holtwood SES	102	102
	2.	Wallenpaupack HES	44	44
	3.	Safe Harbor HES (PP&L Share)	139	139
		Total Hydro	285	285
Nuclear	4.	Susquehanna	1,921	1,950
Coal	5.	Brunner Island	1,434	1,469
	6.	Montour	1,505	1,525
	7.	Sunbury	362	389
	8.	Martins Creek Units 1 and 2	280	300
	9.	Holtwood	72	73
	10.	Keystone (PP&L Share)	210	210
	11.	Conemaugh (PP&L Share)	194	194
		Total Coal	4,057	4,160
Oil	12.	Martins Creek Units 3 and 4	1,640	1,640
	13.	Diesels	22	22
	14.	Combustion Turbines	374	486
		Total Oil	2,036	2,148
NUG	15.	Non-Utility Generation	504	504
		TOTAL CAPABILITY (Effective 10/1/94)	8,803	9,047

(1) PP&L has sales arrangements with AE, JCP&L, GPU and BG&E, which reduce the capacity levels indicated for the term of the sales.

CHART 3-1

PP&L RESOURCES / OBLIGATIONS
1994 LCP LOADS



TOTAL OBLIGATION INCLUDES CAPACITY CREDIT SALES AND PJM OBLIGATION

TABLE 3-2

PP&L's Resources / Obligations Summary

1994 LCP MEDIAN LOADS

PJM Reserve Requirement – 22.0% (1994), 21.5% (1995), 21% (1996), 20.5% (1997), 20% (1998-2013)

Planning Period	(1) Peaks (MW) Summer	Winter	(2) Net Resources (MW)	PP&L Obligations To PJM (3) Estimated Obligation (MW)	% Over Winter Peak	Capacity Credits (MW) (4) BG&E (Est.)	PEPCO	GPU	(5) Total Obligation (MW)	(6) Net Resources over Total Obligation MW		%
1994	5,550	6,635	8,117	7,481	12.8%	50	147	390	8,068	50	(7)	0.6%
1995	5,665	6,760	8,159	7,542	11.6%	183	0	0	7,725	430	(7)	5.6%
1996	5,765	6,830	8,348	7,759	13.6%	0	0	0	7,759	590		7.6%
1997	5,840	6,960	8,537	7,831	12.5%	0	0	0	7,831	710		9.1%
1998	5,965	7,095	8,726	7,962	12.2%	0	0	0	7,962	760		9.5%
1999	6,075	7,240	8,897	8,117	12.1%	0	0	0	8,117	780		9.6%
2000	6,200	7,375	9,068	8,277	12.2%	0	0	0	8,277	790		9.5%
2001	6,325	7,500	9,329	8,424	12.3%	0	0	0	8,424	910		10.8%
2002	6,435	7,645	9,329	8,577	12.2%	0	0	0	8,577	750		8.7%
2003	6,560	7,775	9,329	8,731	12.3%	0	0	0	8,731	600		6.9%
2004	6,685	7,900	9,329	8,871	12.3%	0	0	0	8,871	460		5.2%
2005	6,795	8,025	9,312	9,012	12.3%	0	0	0	9,012	300		3.3%
2006	6,900	8,150	9,312	9,152	12.3%	0	0	0	9,152	160		1.7%
2007	7,010	8,265	9,312	9,281	12.3%	0	0	0	9,281	30		0.3%
2008	7,115	8,380	9,312	9,410	12.3%	0	0	0	9,410	-100		-1.1%
2009	7,220	8,485	9,312	9,528	12.3%	0	0	0	9,528	-220		-2.3%
2010	7,325	8,590	9,312	9,646	12.3%	0	0	0	9,646	-330		-3.4%
2011	7,415	8,695	9,312	9,764	12.3%	0	0	0	9,764	-450		-4.6%
2012	7,520	8,790	9,312	9,871	12.3%	0	0	0	9,871	-560		-5.7%
2013	7,615	8,895	9,312	9,989	12.3%	0	0	0	9,989	-680		-6.8%

Notes:

(1) Peaks include expected transactions with Luzerne Electric and other FERC customers. The peak load data is for PL System, not PL Group.

(2) This column reflects the net effect of Capacity and Energy arrangements with AE, BG&E, and JCP&L and includes the additional resources (NUG output and Interruptible Load) as shown on page 2 of this table.

(3) PP&L's allocated share of PJM's installed capacity obligation as determined in the PJM Agreement. The estimated forecast obligation shown was determined using installed capacity obligation for PL Group (PL & LU). This obligation is customarily presented in terms of summer rated capacity. The "Winter" obligation is an equivalent value adusted by the difference between PL Summer and Winter installed capacity. 1994 and 1995 are estimated based on the latest after-the-fact obligation calcuation. The obligations for 1996-2003 are based on the PJM Load and Capacity Forecast and the Allocation of Forecast Requirements dated July 14, 1994.
Obligations for years 2004-2013 are calculated assuming a 12.3% reserve over winter peak (same as 2003)

(4) PP&L's additional obligations are those resulting from capacity credit sales arising from two party agreements. The GPU and PEPCO sales are firm.

(5) PP&L's Total Obligation is the sum of its PJM Obligation and Capacity Credit Sales.

(6) Net Resources over Total Obligations is PP&L's Net Resources in excess of PP&L's Total Obligations.

(7) The net resources shown for 1994 and 1995 are based on a PJM obligation calculated on an after-the-fact accounting method which uses the latest PP&L peak load and unit performance forecasts.

TABLE 3-2 (Continued)

PP&L's Resources / Obligations Summary

1994 LCP MEDIAN LOADS

Further Details and Background data

(Megawatts)

Planning Period	(1) Existing Capacity	(2) Capacity Additions & Rerates	(3) Capacity Retirements & Derates	(4) Utility Purchases/Sales AE	BG&E	JCP&L	(5) NUGs	(6) Net Installed Including NUG	(7) Demand-Side Resources IL (Load Value)	I L (Used as a Resource)	(8) Net Resources	Reserve as Percent of Winter Peak
1994	8,498	45	0	-129	-129	-845	504	7,844	229	273	8,117	22%
1995	8,543	45	0	-129	-132	-845	504	7,888	229	273	8,160	21%
1996	8,588	0	0	-129	-132	-756	504	8,075	229	273	8,348	22%
1997	8,588	0	0	-129	-132	-567	504	8,264	229	273	8,537	23%
1998	8,588	0	0	-129	-132	-378	504	8,453	229	273	8,726	23%
1999	8,588	0	-18	-129	-132	-189	504	8,824	229	273	8,897	23%
2000	8,570	0	-18	-129	-132	0	504	8,795	229	273	9,068	23%
2001	8,552	0	0	0	0	0	504	9,056	229	273	9,329	24%
2002	8,552	0	0	0	0	0	504	9,056	229	273	9,329	22%
2003	8,552	0	0	0	0	0	504	9,056	229	273	9,329	20%
2004	8,552	0	0	0	0	0	504	9,056	229	273	9,329	18%
2005	8,552	0	-17	0	0	0	504	9,039	229	273	9,312	16%
2006	8,535	0	0	0	0	0	504	9,039	229	273	9,312	14%
2007	8,535	0	0	0	0	0	504	9,039	229	273	9,312	13%
2008	8,535	0	0	0	0	0	504	9,039	229	273	9,312	11%
2009	8,535	0	0	0	0	0	504	9,039	229	273	9,312	10%
2010	8,535	0	0	0	0	0	504	9,039	229	273	9,312	8%
2011	8,535	0	0	0	0	0	504	9,039	229	273	9,312	7%
2012	8,535	0	0	0	0	0	504	9,039	229	273	9,312	6%
2013	8,535	0	0	0	0	0	504	9,039	229	273	9,312	5%

Notes:

(1) PP&L's total existing capacity shown reflects the winter ratings of all units.

(2) Capacity additions/unit rerates reflect the following:
PP&L's share of the SSES uprates : Unit 2, 45MW (6/94) and Unit 1, 45MW (6/95).

(3) Capacity retirements/unit derates reflect the following: Estimated net capacity reduction resulting from the installation of scrubbers to comply with the Clean Air Act.
1998 - Montour Unit 1 (18MW)
2000 - Montour Unit 2 (18MW)
2005 - Brunner Island Unit 3 (17MW)

(4) The Purchases/Sales indicated reflect the Capacity and Energy arrangements with AE, BG&E and JCP&L.
- Atlantic Electric (AE): Agreement with AE for 129 MW (winter rating) PL coal fired generation 10/1/91 thru 9/30/00
- Baltimore Gas & Electric (BG&E): Agreement with BG&E for the sale of capacity and energy associated with 6.94 % of SSES 10/1/91 thru 5/31/01.
- Jersey Central Power & Light (JCP&L): Agreement with JCP&L to purchase a 845 MW slice of System Capacity and Energy thru 12/95. After 1995 the sale decreases uniformly (20%/yr) until expiration 12/31/99.

(5) 504 MW of NUG on PP&L's system is claimed as capacity as of 6/1/92.

(6) Net Installed Including NUG is the measure of PP&L's total supply-side resources available to meet the energy needs of its customers.

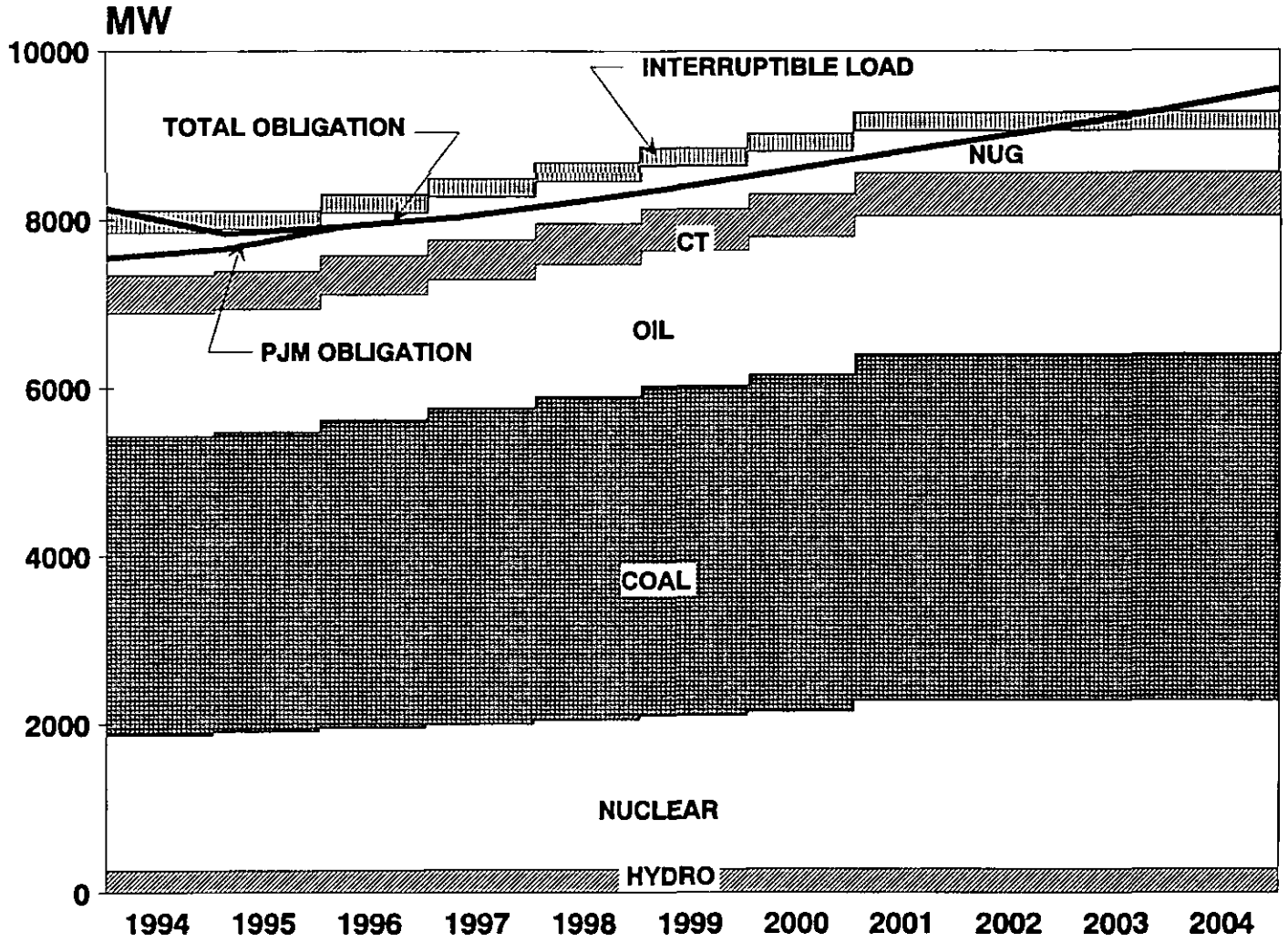
(7) Demand-Side Resources available to PP&L which can be used to enhance system reliability and PP&L's resource mix.

(8) Net Resources are the sum of PP&L's Net Installed Capacity Including NUG and Interruptible Load Credit.

PP&L RESOURCES / OBLIGATIONS

CHART 3-2

1994 HIGH LOADS



TOTAL OBLIGATION INCLUDES CAPACITY CREDIT SALES AND PJM OBLIGATION

TABLE 3-3

PP&L's Resources / Obligations Summary

1994 LCP HIGH LOADS

PJM Reserve Requirement – 22.0% (1994), 21.5% (1995), 21% (1996), 20.5% (1997), 20% (1998-2013)

Planning Period	(1) Peaks (MW) Summer	Winter	(2) Net Resources (MW)	PP&L Obligations: To PJM (3) Estimated Obligati (MW)	% Over Winter Peak	Capacity Credits (MW) (4) BG&E (Est.)	PEPCO	GPU	(5) Total Obligation (MW)	(6) Net Resources over Total Obligation MW		%
1994	5,596	6,690	8,117	7,543	12.8%	50	147	390	8,130	-10	(7)	-0.1%
1995	5,749	6,860	8,159	7,654	11.6%	183	0	0	7,837	320	(7)	4.1%
1996	5,883	6,970	8,348	7,918	13.6%	0	0	0	7,918	430		5.4%
1997	5,991	7,140	8,537	8,034	12.5%	0	0	0	8,034	500		6.2%
1998	6,154	7,320	8,726	8,214	12.2%	0	0	0	8,214	510		6.2%
1999	6,293	7,500	8,897	8,408	12.1%	0	0	0	8,408	490		5.8%
2000	6,465	7,690	9,068	8,631	12.2%	0	0	0	8,631	440		5.1%
2001	6,645	7,880	9,329	8,851	12.3%	0	0	0	8,851	480		5.4%
2002	6,801	8,080	9,329	9,065	12.2%	0	0	0	9,065	260		2.9%
2003	6,978	8,270	9,329	9,287	12.3%	0	0	0	9,287	40		0.4%
2004	7,184	8,490	9,329	9,534	12.3%	0	0	0	9,534	-200		-2.1%
2005	7,367	8,700	9,312	9,770	12.3%	0	0	0	9,770	-460		-4.7%
2006	7,543	8,910	9,312	10,006	12.3%	0	0	0	10,006	-690		-6.9%
2007	7,744	9,130	9,312	10,253	12.3%	0	0	0	10,253	-940		-9.2%
2008	7,939	9,350	9,312	10,500	12.3%	0	0	0	10,500	-1,190		-11.3%
2009	8,160	9,590	9,312	10,769	12.3%	0	0	0	10,769	-1,460		-13.6%
2010	8,374	9,820	9,312	11,027	12.3%	0	0	0	11,027	-1,720		-15.6%
2011	8,579	10,060	9,312	11,297	12.3%	0	0	0	11,297	-1,980		-17.5%
2012	8,812	10,300	9,312	11,566	12.3%	0	0	0	11,566	-2,250		-19.5%
2013	8,912	10,410	9,312	11,690	12.3%	0	0	0	11,690	-2,380		-20.4%

Notes:

(1) Peaks include expected transactions with Luzerne Electric and other FERC customers. The peak load data is for PL System, not PL Group.

(2) This column reflects the net effect of Capacity and Energy arrangements with AE, BG&E, and JCP&L and includes the additional resources (NUG output and Interruptible Load) as shown on page 2 of this table.

(3) PP&L's allocated share of PJM's installed capacity obligation as determined in the PJM Agreement. The estimated forecast obligation shown was determined using installed capacity obligation for PL Group (PL & LU). This obligation is customarily presented in terms of summer rated capacity. The "Winter" obligation is an equivalent value adusted by the difference between PL Summer and Winter installed capacity. 1994 and 1995 are estimated based on the latest after-the-fact obligation calcuation. The obligations for 1996-2003 are based on the PJM Load and Capacity Forecast and the Allocation of Forecast Requirements dated July 14, 1994.
Obligations for years 2004-2013 are calculated assuming a 12.3% reserve over winter peak (same as 2003)

(4) PP&L's additional obligations are those resulting from capacity credit sales arising from two party agreements. The GPU and PEPCO sales are firm.

(5) PP&L's Total Obligation is the sum of its PJM Obligation and Capacity Credit Sales.

(6) Net Resources over Total Obligations is PP&L's Net Resources in excess of PP&L's Total Obligations.

(7) The net resources shown for 1994 and 1995 are based on a PJM obligation calculated on an after-the-fact accounting method which uses the latest PP&L peak load and unit performance forecasts.

TABLE 3-3 (Continued)

PP&L's Resources / Obligations Summary

1994 LCP HI LOADS

Further Details and Background data

(Megawatts)

Planning Period	(1) Existing Capacity	(2) Capacity Additions & Rerates	(3) Capacity Retirements & Derates	(4) Utility Purch./Sales AE	BG&E	JCP&L	(5) NUGs	(6) Net Installed Including NUG	(7) Demand-Side Resources I L	I L (Used as a Resource)	(8) Net Resources	Reserve as Percent of Winter Peak
1994	8,498	46	0	-129	-129	-946	504	7,844	229	273	8,117	21%
1995	8,543	46	0	-129	-132	-946	504	7,886	229	273	8,159	19%
1996	8,588	0	0	-129	-132	-756	504	8,075	229	273	8,348	20%
1997	8,588	0	0	-129	-132	-567	504	8,264	229	273	8,537	20%
1998	8,588	0	0	-129	-132	-378	504	8,453	229	273	8,726	18%
1999	8,588	0	-18	-129	-132	-189	504	8,624	229	273	8,897	18%
2000	8,570	0	-18	-129	-132	0	504	8,795	229	273	9,068	18%
2001	8,552	0	0	0	0	0	504	9,056	229	273	9,329	18%
2002	8,552	0	0	0	0	0	504	9,056	229	273	9,329	15%
2003	8,552	0	0	0	0	0	504	9,056	229	273	9,329	13%
2004	8,552	0	0	0	0	0	504	9,056	229	273	9,329	10%
2005	8,552	0	-17	0	0	0	504	9,039	229	273	9,312	7%
2006	8,535	0	0	0	0	0	504	9,039	229	273	9,312	5%
2007	8,535	0	0	0	0	0	504	9,039	229	273	9,312	2%
2008	8,535	0	0	0	0	0	504	9,039	229	273	9,312	0%
2009	8,535	0	0	0	0	0	504	9,039	229	273	9,312	-3%
2010	8,535	0	0	0	0	0	504	9,039	229	273	9,312	-5%
2011	8,535	0	0	0	0	0	504	9,039	229	273	9,312	-7%
2012	8,535	0	0	0	0	0	504	9,039	229	273	9,312	-10%
2013	8,535	0	0	0	0	0	504	9,039	229	273	9,312	-11%

Notes:

(1) PP&L's total existing capacity shown reflects the winter ratings of all units.

(2) Capacity additions/unit rerates reflect the following:
PP&L's share of the SSES uprates : Unit 2, 45MW (6/94) and Unit 1, 46MW (6/95).

(3) Capacity retirements/unit derates reflect the following: Estimated net capacity reduction resulting from the installation of scrubbers to comply with the Clean Air Act.
1989 - Montour Unit 1 (18MW)
2000 - Montour Unit 2 (18MW)
2005 - Brunner Island Unit 3 (17MW)

(4) The Purchases/Sales indicated reflect the Capacity and Energy arrangements with AE, BG&E and JCP&L.
-- Atlantic Electric (AE): Agreement with AE for 129 MW (winter rating) PL coal fired generation 10/1/91 thru 9/30/00
-- Baltimore Gas & Electric (BG&E): Agreement with BG&E for the sale of capacity and energy associated with 5.94 % of SSES 10/1/91 thru 5/31/01.
-- Jersey Central Power & Light (JCP&L): Agreement with JCP&L to purchase a 945 MW slice of System Capacity and Energy thru 12/95.
After 1995 the sale decreases uniformly (20%/yr) until expiration 12/31/99.

(5) 504 MW of NUG on PP&L's system is claimed as capacity as of 8/1/92.

(6) Net Installed Including NUG is the measure of PP&L's total supply-side resources available to meet the energy needs of its customers.

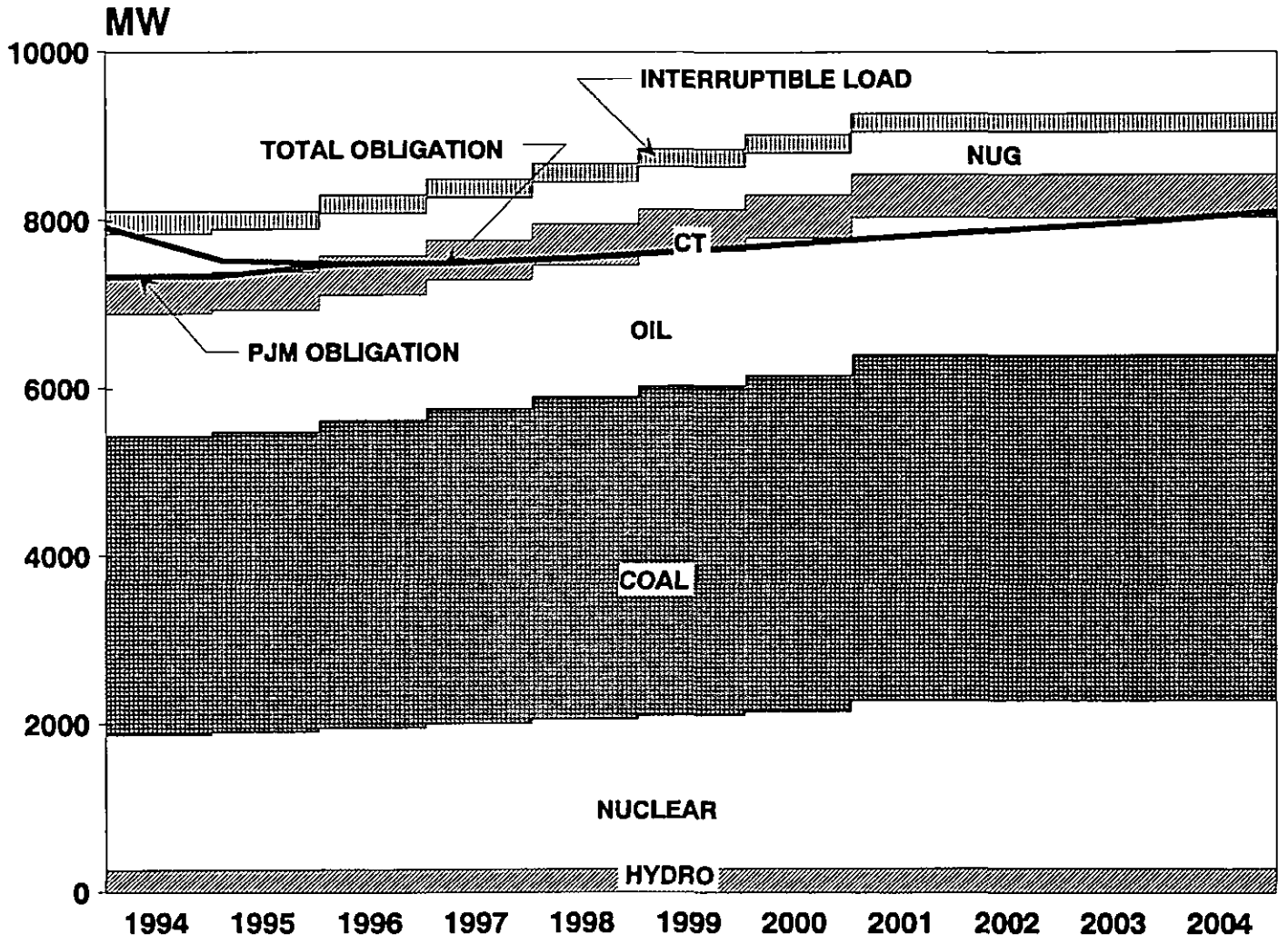
(7) Demand-Side Resources available to PP&L which can be used to enhance system reliability and PP&L's resource mix.

(8) Net Resources are the sum of PP&L's Net Installed Capacity Including NUG and Interruptible Load Credit.

PP&L RESOURCES / OBLIGATIONS

CHART 3-3

1994 LOW LOADS



TOTAL OBLIGATION INCLUDES CAPACITY CREDIT SALES AND PJM OBLIGATION

TABLE 3-4

PP&L's Resources / Obligations Summary

1994 LCP LOW LOADS

PJM Reserve Requirement – 22.0% (1994), 21.5% (1995), 21% (1996), 20.5% (1997), 20% (1998-2013)

Planning Period	(1) Peaks (MW) Summer	Winter	(2) Net Resources (MW)	PP&L Obligations To PJM (3) Estimated Obligati (MW)	% Over Winter Peak	Capacity Credits (MW) (4) BG&E (Est.)	PEPCO	GPU	(5) Total Obligation (MW)	(6) Net Resources over Total Obligation MW		%
1994	5,437	6,500	8,117	7,329	12.8%	50	147	390	7,916	200	(7)	2.5%
1995	5,514	6,580	8,159	7,341	11.6%	183	0	0	7,524	630	(7)	8.4%
1996	5,562	6,590	8,348	7,486	13.6%	0	0	0	7,486	860		11.5%
1997	5,588	6,660	8,537	7,493	12.5%	0	0	0	7,493	1,040		13.9%
1998	5,658	6,730	8,726	7,552	12.2%	0	0	0	7,552	1,170		15.5%
1999	5,714	6,810	8,897	7,635	12.1%	0	0	0	7,635	1,260		16.5%
2000	5,792	6,890	9,068	7,733	12.2%	0	0	0	7,733	1,340		17.3%
2001	5,870	6,960	9,329	7,817	12.3%	0	0	0	7,817	1,510		19.3%
2002	5,934	7,050	9,329	7,909	12.2%	0	0	0	7,909	1,420		18.0%
2003	6,007	7,120	9,329	7,995	12.3%	0	0	0	7,995	1,330		16.6%
2004	6,101	7,210	9,329	8,097	12.3%	0	0	0	8,097	1,230		15.2%
2005	6,173	7,290	9,312	8,186	12.3%	0	0	0	8,186	1,130		13.8%
2006	6,240	7,370	9,312	8,276	12.3%	0	0	0	8,276	1,040		12.6%
2007	6,319	7,450	9,312	8,366	12.3%	0	0	0	8,366	950		11.4%
2008	6,393	7,530	9,312	8,456	12.3%	0	0	0	8,456	860		10.2%
2009	6,484	7,620	9,312	8,557	12.3%	0	0	0	8,557	760		8.9%
2010	6,566	7,700	9,312	8,647	12.3%	0	0	0	8,647	670		7.7%
2011	6,635	7,780	9,312	8,737	12.3%	0	0	0	8,737	580		6.6%
2012	6,724	7,860	9,312	8,826	12.3%	0	0	0	8,826	490		5.6%
2013	6,806	7,950	9,312	8,928	12.3%	0	0	0	8,928	380		4.3%

Notes:

(1) Peaks include expected transactions with Luzerne Electric and other FERC customers. The peak load data is for PL System, not PL Group.

(2) This column reflects the net effect of Capacity and Energy arrangements with AE, BG&E, and JCP&L and includes the additional resources (NUG output and Interruptible Load) as shown on page 2 of this table.

(3) PP&L's allocated share of PJM's installed capacity obligation as determined in the PJM Agreement. The estimated forecast obligation shown was determined using installed capacity obligation for PL Group (PL & LU). This obligation is customarily presented in terms of summer rated capacity. The "Winter" obligation is an equivalent value adusted by the difference between PL Summer and Winter installed capacity. 1994 and 1995 are estimated based on the latest after-the-fact obligation calcuation. The obligations for 1996-2003 are based on the PJM Load and Capacity Forecast and the Allocation of Forecast Requirements dated July 14, 1994.
Obligations for years 2004-2013 are calculated assuming a 12.3% reserve over winter peak (same as 2003)

(4) PP&L's additional obligations are those resulting from capacity credit sales arising from two party agreements. The GPU and PEPCO sales are firm.

(5) PP&L's Total Obligation is the sum of its PJM Obligation and Capacity Credit Sales.

(6) Net Resources over Total Obligations is PP&L's Net Resources in excess of PP&L's Total Obligations.

(7) The net resources shown for 1994 and 1995 are based on a PJM obligation calculated on an after-the-fact accounting method which uses the latest PP&L peak load and unit performance forecasts.

TABLE 3-4 (Continued)

PP&L's Resources / Obligations Summary

1994 LCP LOW LOADS

Further Details and Background data

(Megawatts)

Planning Period	(1) Existing Capacity	(2) Capacity Additions & Rerates	(3) Capacity Retirements & Derates	(4) Utility Purch./Sales AE	BG&E	JCP&L	(5) NUGs	(6) Net Installed Including NUG	(7) Demand-Side Resources I L	I L (Used as a Resource)	(8) Net Resources	Reserve as Percent of Winter Peak
1994	8,498	45	0	-129	-129	-945	504	7,844	229	273	8,117	25%
1995	8,543	45	0	-129	-132	-945	504	7,886	229	273	8,159	24%
1996	8,588	0	0	-128	-132	-756	504	8,076	229	273	8,348	27%
1997	8,588	0	0	-128	-132	-567	504	8,284	229	273	8,537	28%
1998	8,588	0	0	-128	-132	-378	504	8,453	229	273	8,726	30%
1999	8,588	0	-18	-129	-132	-189	504	8,624	229	273	8,897	31%
2000	8,570	0	-18	-129	-132	0	504	8,795	229	273	9,068	32%
2001	8,552	0	0	0	0	0	504	9,056	229	273	9,329	34%
2002	8,552	0	0	0	0	0	504	9,056	229	273	9,329	32%
2003	8,552	0	0	0	0	0	504	9,056	229	273	9,329	31%
2004	8,552	0	0	0	0	0	504	9,056	229	273	9,329	29%
2005	8,552	0	-17	0	0	0	504	9,039	229	273	9,312	28%
2006	8,535	0	0	0	0	0	504	9,039	229	273	9,312	26%
2007	8,535	0	0	0	0	0	504	9,039	229	273	9,312	25%
2008	8,535	0	0	0	0	0	504	9,039	229	273	9,312	24%
2009	8,535	0	0	0	0	0	504	9,039	229	273	9,312	22%
2010	8,535	0	0	0	0	0	504	9,039	229	273	9,312	21%
2011	8,535	0	0	0	0	0	504	9,039	229	273	9,312	20%
2012	8,535	0	0	0	0	0	504	9,039	229	273	9,312	18%
2013	8,535	0	0	0	0	0	504	9,039	229	273	9,312	17%

Notes:

(1) PP&L's total existing capacity shown reflects the winter ratings of all units.

(2) Capacity additions/unit rerates reflect the following:
PP&L's share of the SSES uprates : Unit 2, 45MW (6/94) and Unit 1, 46MW (6/95).

(3) Capacity retirements/unit derates reflect the following: Estimated net capacity reduction resulting from the installation of scrubbers to comply with the Clean Air Act.
1999 - Montour Unit 1 (18MW)
2000 - Montour Unit 2 (18MW)
2005 - Brunner Island Unit 3 (17MW)

(4) The Purchases/Sales indicated reflect the Capacity and Energy arrangements with AE, BG&E and JCP&L.
-- Atlantic Electric (AE): Agreement with AE for 129 MW (winter rating) PL coal fired generation 10/1/91 thru 9/30/00
-- Baltimore Gas & Electric (BG&E): Agreement with BG&E for the sale of capacity and energy associated with 5.94 % of SSES 10/1/91 thru 6/31/01.
-- Jersey Central Power & Light (JCP&L): Agreement with JCP&L to purchase a 945 MW slice of System Capacity and Energy thru 12/95. After 1995 the sale decreases uniformly (20%/yr) until expiration 12/31/99.

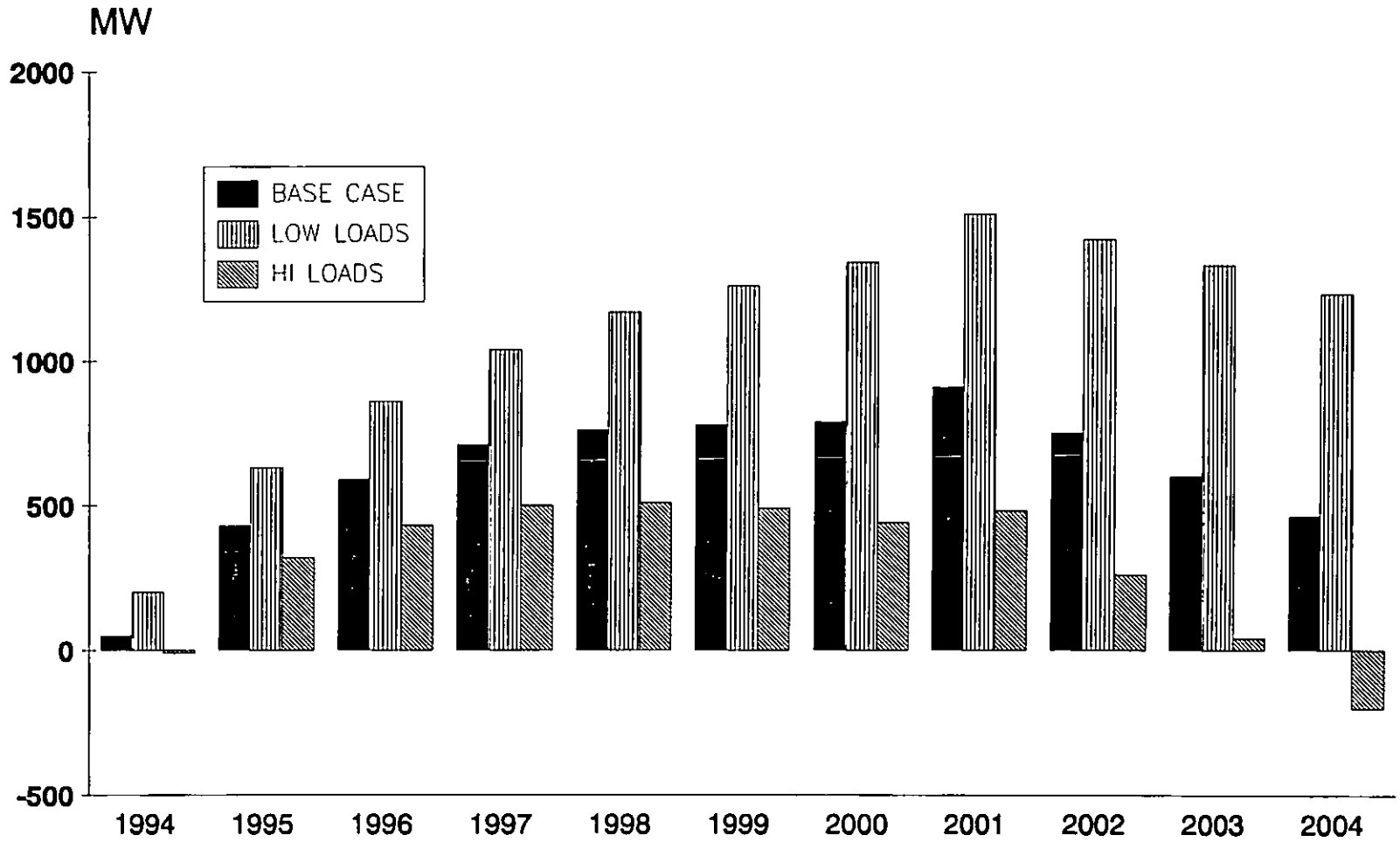
(5) 504 MW of NUG on PP&L's system is claimed as capacity as of 8/1/92.

(6) Net Installed Including NUG is the measure of PP&L's total supply-side resources available to meet the energy needs of its customers.

(7) Demand-Side Resources available to PP&L which can be used to enhance system reliability and PP&L's resource mix.

(8) Net Resources are the sum of PP&L's Net Installed Capacity Including NUG and Interruptible Load Credit.

PP&L NET RESOURCES OVER OBLIGATIONS



CHAPTER 4

EXISTING GENERATION - NUCLEAR

CHAPTER 4
BUDGET DISCUSSION - EXISTING GENERATION-NUCLEAR

This chapter includes a discussion of the capital projects identified for Susquehanna SES during the 1995-1999 five-year period. All of the estimated costs discussed in this chapter reflect PP&L 90% share of Susquehanna, and are in escalated dollars.

A. General Discussion

Estimated expenditures for 1995 are $49.5 million and for the five-year period 1995-1999, $213.8 million. These estimates reflect a detailed review of work anticipated in 1995 and the ongoing portion of these projects that extends into future years. Expenditure levels beyond 1995 represent continuation of existing projects and emergent work. This capital budget includes allowances within individual projects to provide a level of assurance that the amount budgeted will not be exceeded for constant scope. Scope growth or emergent work will be funded from a reserve for that purpose. A breakdown of the estimated costs for the five-year period 1995-1999 is shown in Table 4-1. Since 1993, Capital requirements for Susquehanna have been on a downward trend. This trend is expected to continue, even as industry experience indicates that we should expect to replace some obsolete equipment in this timeframe. In addition, strategic planning initiatives are nearing completion which are anticipated to further reduce capital requirements.

The capital costs at Susquehanna are budgeted for individual project-related work and capital "pools" of smaller, routine expenditures which are not specifically identified project by project. The project-related work is divided, for information purposes, into Major Projects or Minor Replacements. The project-related work generally has defined starting and finishing dates to complete a predetermined scope of work at an approved:

TABLE 4-1
BREAKDOWN OF EXISTING GENERATION NUCLEAR PROJECTS
FIVE YEAR EXPENDITURES
BY CATEGORY
$ MILLIONS - ESCALATED

	# of Projects	1995	1996	1997	1998	1999	Total 1995-1999	% of $
Major Projects								
Regulatory/Nuclear Safety	12	3.1	7.4	3.9	0.2		14.6	7
Minor Replacements	22	18.5	20.0	10.3	1.4		50.2	23
Economic/Performance Improvements	20	17.5	0.8	0.4	0.3		19.0	9
Work Conditions/Safety Improvements	5	0.6	0.9	0.9			2.4	1
Subtotal	59	39.7	29.1	15.5	1.9	0.0	86.2	40
Minor Replacements								
Minor Work Projects - Capital		0.9	0.9	1.0	1.0	1.0	4.8	2
Maintenance - Capital Replacements		0.3	0.9	0.9	1.0	1.0	4.1	2
Site Services - Capital		0.8	0.5	0.5	0.5	0.5	2.8	1
Subtotal		2.0	2.3	2.4	2.5	2.5	11.7	5
Capital Pools								
Capital Furniture		0.4	0.1	0.1	0.1	0.1	0.8	0
Capital Equipment		0.4	0.4	0.4	0.4	0.4	2.0	1
Capital Spare Parts		1.5	1.4	1.4	1.4	1.5	7.2	3
Capital Tools		0.8	0.9	1.0	1.0	1.0	4.7	2
Pooled Inventory Management		0.1	0.2	0.2	0.2	0.2	0.9	0
Subtotal		3.2	3.0	3.1	3.1	3.2	15.6	6
Other								
Uncommitted		4.6	10.6	21.8	33.0	30.3	100.3	49
TOTAL		49.5	45.0	42.8	40.5	36.0	213.8	100

TABLE 4-2
EXISTING GENERATION NUCLEAR MAJOR PROJECTS
FIVE-YEAR BUDGET PLAN
$ MILLIONS - ESCALATED

	1995	1996	1997	1998	1999	Total 1995-1999
Regulatory/Nuclear Safety						
Spent Fuel Storage Additions	0.6	6.0	3.3	0.2		10.1
Reactor Core Stability - Unit 1	0.2	0.6	0.3			1.1
Reactor Core Stability - Unit 2	0.2	0.6	0.3			1.1
Reactor Water Level Instrument - Unit 1	0.4	0.2				0.6
Reactor Water Level Instrument - Unit 2	0.4					0.4
Plant Physical Protection	0.5					0.5
SUBTOTAL	2.3	7.4	3.9	0.2	0.0	13.8
Replacements						
Reactor Recirculation Pump Shaft - Unit 1	0.5	5.1	0.5			6.1
Reactor Recirculation Pump Shaft - Unit 2	2.3	2.2	1.5			6.0
Plant Computer Upgrade - Unit 1	1.9	4.7	0.7			7.3
Plant Computer Upgrade - Unit 2	4.6	1.6	0.7			6.9
Plant Computer - Common	0.4	0.2	0.1			0.7
Erosion/Corrosion Piping - Unit 1	1.3	1.1	1.0			3.4
Erosion/Corrosion Piping - Unit 2	1.7	0.7	1.0			3.4
Condenser Tube Cleaning - Unit 1	0.8	0.1				0.9
Condenser Tube Cleaning - Unit 2	1.1	0.1				1.2
Control Rod Blade Rep - Unit 1	0.2	0.9	0.2	0.2		1.5
Control Rod Blade Rep - Unit 2	0.7	0.3	0.2			1.2
SUBTOTAL	15.5	17.0	5.9	0.2	0.0	38.6
Economic/Performance Improvements						
Power Uprate Base - Unit 1	3.2					3.2
Power Uprate Mods - Unit 1	1.8					1.8
Refuel Platform Upgrade - Unit 1	1.2					1.2
Refuel Platform Upgrade - Unit 2	1.2					1.2
Condenser Demin Heel Removal - Unit 1	1.2					1.2
Condenser Demin Heel Removal - Unit 2	1.2					1.2
Digital Feedwater Control - Unit 1	1.1					1.1
Digital Feedwater Control - Unit 2	1.1					1.1
SUBTOTAL	12.0	0.0	0.0	0.0	0.0	12.0
Working Conditions/Safety Improvements						
Fire Protection Upgrades - Unit 1	0.2					0.2
Fire Protection Upgrades - Unit 2	0.2					0.2
Fire Protection Upgrades - Common	0.2					0.2
SUBTOTAL	0.6	0.0	0.0	0.0	0.0	0.6
TOTAL	30.4	24.4	9.8	0.4	0.0	65.0

cost. Capital Pools are routine items required at the power plant that are large enough that their costs can be capitalized. Their expenditure levels are determined by assessing past patterns and projecting future expectations.

B. Major Projects

Major projects are significant investments made by the Nuclear Department toward maintaining or improving Plant operations. Each of the Major Projects selected for implementation satisfies one or more of the Department's Five-Year Objectives, which are established to measure our long-term commitment to achieving excellence in operation, maintenance, and support of Susquehanna.

For budget analysis purposes, the Major Projects are categorized into four basic types of work:

1. Regulatory/Nuclear-Safety related projects
2. Replacements
3. Economic/Performance Improvements
4. Work Conditions/Safety Improvements

A brief explanation of each category and the supporting approved projects will be discussed below:

1. Regulatory/Nuclear-Safety Related Projects

   Most projects in this category are to maintain compliance with the requirements of the various regulatory and environmental agencies. In the realm of maintaining nuclear safety, we must consider not only compliance, but also risk reduction, earning the trust of the public, and avoiding the

potential of regulatory intervention. Hence, all of the capital costs in this category, while not necessarily imposed, are considered to be among the highest priority.

The identified costs for the next five years are $14.6 million with $14.4 million established in the first three years. As additional needs are identified, they will be funded from the "Uncommitted" allocation.

For 1995, there are 12 projects identified, amounting to $3.1 million, with the key ones listed as follows:

Reactor Water Level Instrumentation	$0.8 million
Spent Fuel Storage Additions	$0.6 million
Plant Physical Protection	$0.5 million
Reactor Core Stability	$0.4 million

2. Replacements

Replacements are projects which maintain unit performance by replacing deteriorated or obsolete equipment or components with functionally similar items. Such replacements are necessary to avoid the loss of function from the failure of the equipment, which could result in partial or complete load reduction, efficiency loss, and/or unsafe conditions.

The identified costs for the next five years are $50.2 million with $48.8 million established in the first three years. As additional needs are identified due to the aging factor of the Plant, they will be funded from the "Uncommitted" allocation.

For 1995, there are 22 projects, amounting to $18.5 million, in this category. The major ones are listed as follows:

Plant Computer Upgrade	$6.9 million
Erosion/Corrosion Piping Replacement	$3.0 million
Reactor Recirc Pump Shaft Replacement	$2.8 million
Condenser Tube Cleaning	$1.9 million

Over the next five years, the Plant Computer Upgrade and Reactor Recirculating Pump Shaft Replacements are two major projects of enormous proportions:

The Plant Computer System is needed for reliable operation of the Susquehanna power plant. It is unlikely that the regulator would allow the Plant to operate for extended periods of time without a functioning computer. The current system will be at the end of its expected life by 1996. When the reliability degrades, there will be significant increases in cost of repairs, and replacement parts will be difficult to obtain. By replacing the existing computer with a new modern system, we will enhance our ability to monitor the conditions in the Plant, and the computer system will be cheaper to maintain.

Industry experience indicates that the Recirculating Pump Shafts at Susquehanna will crack over time. The pump manufacturer and vendor both recommend performing crack inspections, and preparing for a shaft changeout should significant cracks be discovered. To avoid the potential of catastrophic failure, which will result in significant lost generation, it is prudent to install the new shaft, rather than reinstall the old shaft, while the recirculating pump is disassembled for inspection. A total of $12.1 million is

included for the five-year period to procure and replace both pump shafts in both units, as required.

3. *Economic/Performance Improvements*

Projects in this category are the ones that can improve generating plant availability, capacity and efficiency. They should also help maintain and reduce operating costs in the long run. These projects usually entail the enhancement of overall system performance, resulting in improved cost-effectiveness.

Currently, the identified costs for the next five years are $19.0 million. We estimate the capital costs for the 1995-1999 period in this category to curtail significantly. Any additional needs will be funded from the "Uncommitted" allocation.

For 1995, there are 20 projects in this category. The major ones, which will all be completed in 1995, are listed as follows:

Power Uprate - Base	$3.2 million
Refuel Platform Upgrade	$2.4 million
Condensate Demineralizer Heel Removal	$2.4 million
Digital Feedwater Control	$2.2 million

4. Work Conditions/Safety Improvements

Projects in this category are the ones that can improve working conditions and industrial safety. They are designed to alleviate unusual hazards to personal safety, health and welfare. They are aimed to improve the human factors of all workers and personnel.

The identified costs for the next five years are $2.4 million. Any new projects will be funded from the "Uncommitted" allocation.

For 1995, there are 5 projects, amounting to $0.6 million, in this category. The Fire Protection Upgrade Project at $0.6 million accounts for most of this category.

The five-year budget plan of the larger projects under the above four categories is tabulated in Table 4-2.

C. Minor Replacements

Three separate funds are established to cover various replacements, additions, and property retirements at Susquehanna. They amount to an annual total of about $2.5 million. The 1995-1999 period will amount to about $11.7 million. These minor replacements can be categorized into the following:

1. Minor Work Projects
2. Maintenance - Capital Replacements
3. Site Services - Capital

A brief explanation of each category is discussed below:

1. Minor Work Projects

Minor work projects are small projects which are authorized under subordinate ERs and are expected to cost under $0.09 million each. The 1995 Budget includes $0.9 million, which continues a downward trend.

2. Maintenance - Capital Replacements

   This is comprised of all maintenance activities associated with the replacement of retirement units. The 1995 Budget includes an allowance of $0.3 million for these replacements.

3. Site Services - Capital

   This category includes minor building and grounds improvements which are outside the realm of plant operations. Individual work items in this category of work generally cost less than $0.09 million each, and are authorized by the Vice President - Nuclear Operations. The 1995 Budget includes $0.8 million for this item.

D. Capital Pools

Capital Pools contain funding for smaller, routine items that are required to support plant operations. They are funded at about $3.1 million per year. For the 1995-1999 period, the total amounts to $15.6 million. The 1995 Budget includes $3.2 million for these items.

The Capital Pools are classified into the following categories:

1. Capital Spare Parts
2. Capital Tools
3. Capital Equipment
4. Capital Furniture
5. Pooled Inventory Management

A brief explanation of each category is discussed below:

1. Capital Spare Parts

   This fund is used to purchase Major Capital Spare Parts with long lead times that would lead to extended outages if the spares were not available. The funding level is based on historical needs along with current forecasts of required spares. The 1995 Budget includes $1.5 million.

2. Capital Tools

   This category includes all large tools to be purchased for use by the workers or craftsmen in operations, maintenance, and installation. The 1995 Budget is $0.8 million.

3. Capital Equipment

   This category consists of all equipment to be purchased for use in operations, maintenance, and installation. The 1995 Budget is $0.4 million.

4. Capital Furniture

   This category includes various kinds of furniture to be purchased for use at Susquehanna, including the Training Center and EOF Building. The 1995 Budget is $0.4 million.

5. Pooled Inventory Management

   PP&L, in partnership with other power companies, is participating in a program designed to share funding for the purchase of high-risk, expensive, long lead-time spare equipment. The intent of this program is to minimize Susquehanna downtime by maintaining a pool, shared by the participants, of

items that could significantly affect the ability to continue power generation by the plant. The 1995 Budget includes $0.1 million for this category.

E. Uncommitted

The Uncommitted portion of the Budget provides for two types of future needs.

The first type is for potential projects which are identified, but have not been included as specific projects because their timing, scope and costs have not yet been adequately defined. For 1995, there are three projects that fall into this category, namely, Thermolag Acceptance, River Water Make-up Line Replacement, and Security System Upgrade.

The second category is a reserve for emergent projects that have not yet been identified. The Plan Review Team will manage this reserve to ensure that funds are made available when high-priority projects emerge.

The size of the reserve is basically determined by analysis of past needs and the ability to identify them, as well as consideration of future conditions and performance expectations. We estimate the Uncommitted fund for the next five years will amount to about $100 million. The Regulatory/Nuclear Safety category probably will be maintained at the current average level of $3 to $5 million per year due to anticipation of continuing regulatory requirements. The Replacement category will be maintained at the current level of $18 to $20 million per year due to the aging factor of the Plant. The two improvement categories, Economic/Performance Improvement and Working Conditions/Safety Improvement are discretionary. We will manage this limited reserves to provide funding for higher priority work.

For 1995, the Uncommitted portion is $4.6 million.

F. Nuclear Fuel

PP&L has established a trust which allows PP&L to lease its 90% share of nuclear fuel for the Susquehanna units. For 1995, PP&L will be able to lease a maximum of $200 million worth of fuel from this trust. This cap is in line with the current expectations for fuel cost during the budget year. Under the lease arrangement the nuclear fuel purchased by the Company is sold to the trust and leased back. When the net investment of the lessor exceeds $200 million, PP&L will then own and finance any additional nuclear fuel purchases. As quarterly lease payments are made to the trust, additional PP&L-owned fuel will be sold to the trust.

Included in the projected fuel purchase are full allowances for additional requirements resulting from the Power Uprate Project, and planned higher capacity factors.

Table 4-3, Column 2, shows nuclear fuel purchases projected for the period 1995 through 2004. Column 3 represents the end-of-year total dollars under the trust agreement. Column 4 contains the PP&L-owned portion of nuclear fuel at year end. Column 5 shows the estimated annual financing requirement which exceeds the limit of the trust agreement. The year-end value of PP&L-owned fuel, Column 4, from 1995 through 1999 is zero. Therefore, no additional financing is required in this period.

TABLE 4-3
PROJECTED NUCLEAR FUEL PURCHASES
90% OWNERSHIP SHARE
$ MILLIONS - ESCALATED

Year	Fuel Purchases	Under Lease @ Year End	PP&L Owned @ Year End	Required Financing
1994	———	147.1	0.0	———
1995	52.1	138.4	0.0	0.0
1996	77.2	153.9	0.0	0.0
1997	47.2	141.1	0.0	0.0
1998	61.5	147.5	0.0	0.0
1999	88.7	172.3	0.0	0.0
2000	49.2	154.8	0.0	0.0
2001	65.0	159.2	0.0	0.0
2002	91.5	181.4	0.0	0.0
2003	54.4	164.5	0.0	0.0
2004	71.9	171.7	0.0	0.0

CHAPTER 5

EXISTING GENERATION - FOSSIL AND HYDRO

CHAPTER 5
BUDGET DISCUSSION-EXISTING GENERATION - FOSSIL AND HYDRO

A. GENERAL DISCUSSION

Projects at existing Fossil and Hydro generating plants are classified as three basic types of work: 1) regulatory projects, most of which are related to maintaining environmental compliance, 2) equipment replacements to continue the operation of plants, and 3) improvement projects. Because of their significant magnitude, expenditures to comply with the 1990 Clean Air Act Amendments are categorized separately. Also, improvement projects are further categorized as projects to improve economic performance and projects to improve working conditions. A breakdown of existing generation costs by category for the five-year period 1995-1999 is shown in Table 5-1. A summary of large projects follows in Table 5-2.

Estimated expenditures for 1995 are $105.1 million and for the five-year period 1995-1999 are $768.0 million. The 1994-1998 Construction Program estimated 1995 expenditures to be $116.9 million and 1995-1999 expenditures to be $834.6 million. The reduction in estimated expenditures is largely due to the efforts of the Market Clearing Price of Generation plant teams to identify opportunities to avoid or defer capital projects. Consistent with the strategies discussed in Chapter 1, projects are scheduled within the five-year period based on consideration of the consequences of deferral, timing of outages, and the need for coordination among projects and outages with the following exceptions:

1. Projects to IMPROVE AVAILABILITY and REDUCE OPERATING AND MAINTENANCE costs which do not recover capital and capital-related costs within five years are deferred beyond the five-year period.

2. BUILDINGS projects at power plants are scheduled on the basis of senior management's review of all corporate buildings projects.

TABLE 5-1
BREAKDOWN OF EXISTING GENERATION PROJECTS
BY CATEGORY
$ MILLIONS - ESCALATED

	# of Projects	1995	1996	1997	1998	1999	Total 1995-1999	% of $
Regulatory/Environmental	27	24.5	47.1	5.8	6.7	4.2	88.3	15
Replacements	35	43.1	10.3	5.3			58.7	10
Improvements								
Economic Improvements	4	1.1	15.4	11.5			28.0	5
Working Conditions/Safety Improvements	7	0.8	0.8	0.7	0.1	0.1	2.5	0
Subtotal	73	69.5	73.6	23.3	6.8	4.3	177.5	30
Clean Air Act Compliance	6	14.1	14.2	148.0	193.9	43.5	413.7	69
Keystone & Conemaugh Clean Air Act	2	5.8					5.8	1
Subtotal -- Clean Air Act	8	19.9	14.2	148.0	193.9	43.5	419.5	70
Subtotal	81	89.4	87.8	171.3	200.7	47.8	597.0	100
Asbestos Abatement Program		1.4	2.1	1.7			5.2	
Keystone & Conemaugh		6.4	6.6	6.8	7.0	7.2	34.0	
Unanticipated Replacements		1.0	1.0	1.1	1.1	1.1	5.3	
Minor Replacements		1.5	1.5	1.6	1.6	1.7	7.9	
Minor Additions		0.7	0.7	0.7	0.8	0.8	3.7	
Subtotal		100.4	99.7	183.2	211.2	58.6	653.1	
Uncommitted		4.7	16.9	31.3	29.9	32.1	114.9	
TOTAL		105.1	116.6	214.5	241.1	90.7	768.0	

TABLE 5-2
EXISTING GENERATION LARGE PROJECTS
ANNUAL EXPENDITURES GREATER THAN $2 MILLION
$ MILLIONS - ESCALATED

	1995	1996	1997	1998	1999	Total 1995-1999	Project Total
Martins Creek							
Units #3&4 - Gas-Oil Co-Firing	0.7	15.4	11.5			27.6	28.0
Sunbury							
Unit #1 - Turbine Rehabilitation	3.9					3.9	12.4
Unit #1 - Boiler Rehabilitation	5.4		0.1			5.5	7.2
Unit #4 - Generator Rotor	0.2	2.5	0.5			3.2	3.3
Dry Fly Ash	1.2	14.9	1.4			17.5	18.1
Bottom Ash Handling	0.2	3.3	0.2			3.7	4.0
Waste Water Treatment	0.5	7.3				7.8	8.0
Clean Air Act	3.5					3.5	7.0
Brunner Island							
Coal Pile Liner	0.2	2.8				3.0	3.4
Unit #2 - Boiler Backpass	0.2	2.8				3.0	3.4
Dry Fly Ash	9.0					9.0	26.1
Montour							
Units #1&2 - Controls	6.4	4.9				11.3	12.9
Unit #1 - Feedwater Heaters	3.1					3.1	3.4
Clean Air Act	10.6	14.2	147.8	193.4	41.3	407.3	429.3
Holtwood							
Fish Passage	6.8	12.3				19.1	20.8
Conemaugh							
Clean Air Act	2.6					2.6	9.4
TOTAL	54.5	80.4	161.5	193.4	41.3	531.1	596.7
TOTAL EXISTING GENERATION (COMMITTED)	105.1	116.6	214.5	241.1	90.7	768.0	

Furthermore, each individual project is fully analyzed prior to final approval to verify its contribution to cash flow and consistency with corporate strategies. This is particularly true of projects at the smaller and less economically competitive plants.

B. ENVIRONMENTAL EXPENDITURES (Other Than Clean Air Act)

Most projects in this category during the 1995-1999 period are to maintain compliance with existing regulations. A major exception is the conversion to dry fly ash disposal at Brunner Island, Sunbury and Holtwood. A combination of new stricter regulations and lack of available disposal areas makes dry conversion the least cost alternative for ash disposal. The conversion to dry ash handling at Brunner Island, Sunbury and Holtwood is budgeted for $45 million of which $28 million is in the 5-Year period. Total environmental expenditures for 1995-1999, other than those for the Clean Air Act, are $88 million.

C. CLEAN AIR ACT COMPLIANCE

The 1995-1999 Construction Program includes costs to comply with the ozone non-attainment provision (Title I) and the acid rain provision (Title IV) of the 1990 Clean Air Act Amendments. The ambient ozone non-attainment provision of Title I requires the installation of Reasonably Available Control Technology (RACT) for NO_x emissions from all PP&L fossil-fueled boilers by May 31, 1995 as part of the initial steps toward solving an ozone non-attainment problem which pervades the Northeast. PP&L is installing low NO_x burners where such installations are technically and economically feasible to comply with Pennsylvania's definition of RACT. The need for additional controls beyond RACT is discussed in the chapter titled "Potential Capital Expenditures Not Included in the Base Capital Plan" (Chapter 11).

Title IV also addresses NOx as well as SO_2 and has two phases of compliance. PP&L's Phase I compliance plan is to burn lower sulfur coal at the seven affected units by the compliance date of January 1, 1995. The low NO_x burners being installed as RACT also address the Title IV NO_x requirements. Compliance with Phase II, which takes effect January 1, 2000, anticipates scrubbers on Montour Units 1 and 2 around the year 2000 and, between 2003 and 2005, Brunner Island Unit 3. Other options actively being considered for SO_2 compliance are lower sulfur fuel and the purchase of SO_2 emission allowances. EPA is required to define Phase II NO_x requirements in 1997.

The total capital cost of compliance with the Clean Air Act is projected to be $590 million. If required, a scrubber at Brunner 3 would cost an additional $220 million. Potential capital expenditures for additional Title I NO_x controls and for air toxics controls under Title III are discussed in Chapter 11.

Compliance costs associated with the jointly owned Keystone and Conemaugh Stations are discussed in Section F of this chapter.

D. REPLACEMENTS

Projects which maintain unit performance by replacing deteriorated or obsolete equipment with functionally similar equipment are termed "replacements."

A major effort during the 1995-1999 period is replacing combustion controls on Montour 1 & 2, and replacing turbine controls on Martins Creek 3 & 4. These control systems are obsolete and have deteriorated to where there is concern for the safe and reliable operation of this equipment. Combustion controls will become even more critical with the installation of low NO_x burners. A total of $12 million is included in the

five-year period for this work. Another significant project, the replacement of boiler components on Brunner Island 2, totals $15 million in the 5-year period.

E. IMPROVEMENTS

Projects to maintain and improve generating plant availability, capacity and efficiency, and maintain and reduce operating costs are developed from a review of each power plant. This review reflects: 1) analyses of problems at the plants that have caused outages and inefficiencies in the past; 2) analyses which indicate the likelihood of losses in the future; and 3) information concerning other utilities' experience as reported by manufacturers and at industry meetings. About $31 million during the five-year period is currently committed to 11 performance improvements, currently scheduled during 1995-1999.

The largest project in this category is the conversion of Martins Creek 3 & 4 to gas/oil co-firing (also discussed in Chapter 3). Natural gas is available outside the winter heating season at a lower cost than #6 fuel oil. Being able to carry up to 50% of the capability of these units with gas will result in substantial substantial savings in fuel costs when gas is available and economically priced. The conversion accounts for $27.6 million of planned expenditures during the five-year period.

Another type of improvement project is related to improved working conditions and safety. During the 1995-1999 period, $2.5 million is committed for 7 specific working conditions and safety projects at existing generating stations. Also, procedures for dealing with the large amounts of asbestos insulation in existing fossil-fueled power plants are complex and expensive. In order to give visibility to this work, a pool is funded to reflect the level of expenditures currently anticipated. Individual Expenditure Requisitions will be issued for each project.

F. KEYSTONE AND CONEMAUGH

During the 1995-1999 period, $34.0 million is included to cover PP&L's share of projects identified in the Keystone and Conemaugh capital budgets (Table 5-1). These budgets have been reviewed and approved by the Keystone and Conemaugh Owners Committee. Individual Expenditure Requisitions are issued for each project.

Clean Air Act compliance projects at Keystone and Conemaugh will incur large costs during 1995-1999. Low NO_x burners and scrubbers will be installed at Conemaugh for Phase I. Low NO_x burners will be installed at Keystone as a result of Title I. A total of $5.8 million is allocated for PP&L's share of these projects during the five-year period. This allocation is in addition to the $34.0 million noted above for the "normal" plant projects.

G. UNANTICIPATED REPLACEMENTS

This pool is funded to allow large in-kind replacements to be made expeditiously. (An allocation for smaller replacements to be administered by each plant is described in Section H, "Minor Items.") The need for many replacements cannot be identified until inspections are performed during a unit's annual overhaul or until failure actually occurs. The amount allocated reflects historical spending for replacements that could not be anticipated at the start of the budget year.

H. MINOR ITEMS

Two pools are funded to cover various replacements, additions, and property retirements at generating stations which cost $50,000 or less. Individual Subordinate Expenditure Requisitions are issued for each project. The replacement pool is intended to allow relatively small, in-kind replacements to be made expeditiously. The allocation for this pool is based, in part, on a list of known work. The remainder is based on the amount of unanticipated work of this type which historically arises during

the year. The allocation for minor replacements for 1995 is $1.5 million with $7.9 million included in the 1995-1999 period (Table 5-1). The allocation for the additions pool for the budget year is based on a list of anticipated work which is prepared by Power Production and on the funding criteria which have been established for the Capital Construction Budget. The allocation for additions for 1995 is $0.7 million with $3.7 million included in the 1995-1999 period (Table 5-1).

I. UNCOMMITTED

The uncommitted portion of the budget provides for two types of future needs. The first is for potential projects which are identified, but have not been included as specific projects in the budget because their timing, scope, or cost have not yet been adequately defined. Most of the funds in uncommitted are allocated for these potential projects. The second need is for projects that are unidentified. The impact of unidentified items on the two-year budget is small in comparison to that of the identified potential projects.

A total of 88 potential projects have been identified and are currently under study with potential capital requirements of $92 million for the five-year period. These projects are relatively well defined through Budget Item requests, but require a final estimate and evaluation before they can be considered for inclusion in the budget as specific projects. As they are evaluated, many of these projects will prove to be unjustified or be scheduled beyond the five-year period.

A total of $114.9 million is allocated over the five-year period for potential projects under study which may materialize and for projects which are presently unidentified (Table 5-1).

Tabulated below are some of the major potential projects and their estimated costs for

which funds have been allocated in the five-year period under uncommitted.

	Possible In-Service Date	Estimated Total In-Service Cost
• Martins Creek 3 & 4 Replace LP Turbine Rotors	1997	$13.0 million
• Montour 2 Replace LP Turbine Rotors	1998	$11.0 million

While funds have been allocated for these projects and others under uncommitted, no commitments have been made to these projects at this time. Each project must receive an individual go/no go evaluation prior to inclusion in the budget or expenditure of funds.

J. ADJUSTMENT

In the 1994-1995 Construction Budget the total budget amount for projects at existing Fossil and Hydro generating plants was adjusted downward by $27 to $45 million per year for the five-year period. This adjustment was intended to reflect the amount of spending which typically does not materialize due to changes in project costs, changes in schedules, and shifting priorities which cannot be anticipated. The 1995-1996 budget eliminates the adjustment in the Fossil & Hydro category. Actual spending in 1992 and 1993 has shown a decreased need for an adjustment. Projects with significant uncertainty in scope and timing have been included in the Uncommitted allocation.

CHAPTER 6

BULK POWER SUPPLY

CHAPTER 6
BUDGET DISCUSSION - BULK POWER SUPPLY

A. GENERAL DISCUSSION

The bulk power transmission system includes all 500 kV and 230 kV lines and switchyards, 500-230 kV substations and the high voltage side of step-down transformers to the 69 kV and 138 kV regional transmission systems.

Several major projects are included in the budget which will improve the reliability of the Susquehanna-related portion of the bulk power system, maintain the overall reliability of the bulk power system at an acceptable level and improve the economic operation of the bulk power system. A geographical summary of bulk power facilities planned for 1995-2004 is shown on a map in Appendix C of this report. A tabular summary of the facilities to be installed through 1999 follows:

TABLE 6-1
SUMMARY OF BULK POWER FACILITY ADDITIONS

	1995	1996	1997	1998	1999	Total 1995-1999
Lines (circuit miles) 230 kV (Reconductor)	11			40	25	76
Circuit Breakers (#) 230 kV 500 kV	5	9	5		2	21

B. IDENTIFIED PROJECTS

The identified projects in the 1995-1999 bulk power program are listed below.

1. A new control cubicle will be established in the Susquehanna 230 kV Switchyard in

1995 to increase the reliability of bulk power facilities associated with the Susquehanna plant to a high level consistent with the operational reliability of the plant.

2. In order to improve the reliability of the Susquehanna Unit 1 230 kV termination in the Susquehanna 230 kV Switchyard, the Jenkins 230 kV Line termination will be relocated from Bay 3 to Bay 4 and the Unit 1 230 kV circuit will be reterminated in a double breaker arrangement in 1995.

3. Seven 230 kV circuit breakers will be replaced at the Susquehanna 230 kV Switchyard in 1996 and 1997. The 230 kV dual pressure gas circuit breakers which terminate the Susquehanna Unit 1 generator lead circuit in Bay 3 of the Susquehanna 230 kV Switchyard and the five remaining air blast circuit breakers will be replaced with higher reliability single pressure gas circuit breakers.

4. A new Susquehanna Transformer #10 Tap 230 kV Switchyard will be established in 1995 on the west side of the Susquehanna River adjacent to the plant to improve the reliability and availability of the Transformer #10 connection.

5. The Primary #1 carrier-pilot relay systems on the Northern PL 500 kV transmission lines (Susquehanna-Alburtis, Susquehanna-Sunbury, and Sunbury-Juniata) will be upgraded by 1998. The Primary #1 carrier-pilot relaying on the Susquehanna-Alburtis 500 kV line will be replaced with a fiber optic pilot relaying system by 1996. The Primary #1 carrier-pilot relaying on the Susquehanna-Sunbury-Juniata 500 kV line will be replaced with a fiber optic pilot relaying system by May 1998.

6. A spare single phase 500-230 kV transformer will be purchased and placed at the Susquehanna plant in 1998. The current system spare transformer is located at Sunbury. Should a transformer failure occur at Susquehanna, the time required to transport the spare unit from Sunbury and the risk of damage during transport

could have significant generator curtailment implications. Purchase of a spare will reduce this exposure.

7. The Hosensack-Buxmont 230 kV Line will be reconductored in 1995 to increase thermal loading capability. This will eliminate single contingency thermal loading limits on the line and increase transfer capability at the 230 kV interface with Philadelphia Electric Co.

8. Continuous monitoring fault recorders and Alarm Management Systems to analyze system performance during fault or disturbance conditions are installed at strategic locations on the bulk power system. Recorders will be installed at Lackawanna in 1995 and at Montour, Martins Creek and Sunbury in later years to provide adequate system coverage for analysis of system disturbances.

9. Several projects are included in the construction program to upgrade deficient and unacceptable relaying on 230 kV facilities. Included in this group are the replacement of tone relays, the upgrading of automatic breaker reclosing schemes, the elimination of continuously energized auxiliary relays and the separation of primary and back-up bus differential relaying components.

10. A number of 230 kV lines have been identified for reconductoring to increase thermal loading capability. Included in this effort are the Siegfried-Frackville Line in 1998. the Martins Creek-Siegfried #2 Line in 1999, and the Brunner Island-West Hempfield Line in 1999.

11. Projects are included in the construction program to replace unreliable 230 kV circuit breakers with higher reliability single pressure gas circuit breakers. Three circuit breakers will be replaced at Martins Creek 230 kV Switchyard in 1996. At Lackawanna 230 kV Substation, four circuit breakers will be replaced, two in 1997 and two in 1999.

C. CAPITAL REQUIREMENTS

The total capital requirements for bulk power facilities for 1995-1996 are $16.8 million. This is approximately $7.6 million less than projected in last year's construction program and is in large part due to the deferral of the purchase of a spare 500-230 kV transformer from 1996 to 1998, a decrease in the 1995 Susquehanna Switchyard work (more work accomplished in 1994 than expected) and a decrease in the estimate of Unidentified. The total capital requirement for bulk power facilities for 1997-1999 is $28.7 million. A summary of 1995-1999 bulk power capital requirements is shown in Table 6-2.

TABLE 6-2

SUMMARY OF BULK POWER CAPITAL REQUIREMENTS

Project	Million $'s Escalated 1995	1996	1997	1998	1999	Total 1995-1999
Susquehanna - Related Projects	5.0	0.7	0.7	2.4		8.8
Northern PP&L Primary Relay Upgrade	0.5	2.7	3.7	1.5		8.4
Hosensack - Buxmont 230 KV Line	1.7					1.7
Siegfried - Frackville 230 KV Line		0.3	2.5	3.7		6.5
Martins Creek - Siegfried #2 230 KV Line			0.1	0.1	1.7	1.9
Brunner Island - West Hempfield 230 KV Line			0.1	0.1	2.2	2.4
Monitoring Recorders/Alarm Management Systems	1.2	0.2	0.5	0.9		2.8
Relaying Upgrade	0.3	1.6	0.3	1.0		3.2
Circuit Breaker Replacements	0.1	0.5	0.2		0.3	1.1
Other Specific Projects	0.6	0.2			0.2	1.0
Pools	0.4	0.3	0.3	0.3	0.3	1.6
Unidentified		0.5	1.1	1.1	3.4	6.1
TOTAL	9.8	7.0	9.5	11.1	8.1	45.5

CHAPTER 7

REGIONAL SUPPLY

CHAPTER 7
BUDGET DISCUSSION - REGIONAL SUPPLY

A. GENERAL DISCUSSION

The regional supply system transmits power from the bulk power transmission system to the area supply substations and directly supplies large power customers and accommodates Non-Utility Generators (NUGs). The regional supply system also provides outlets for a number of smaller generating stations and includes several interconnection points to neighboring systems.

The regional supply system includes all facilities from the high side of the regional transformers to the high side of the transformers of the area supply substations. These facilities include 500-138 kV, 230-138 kV, 230-69 kV, 138-69 kV, and 115-69 kV transformers, 138 kV, 115 kV and 69 kV transmission lines and switching stations, and 138 kV and 69 kV switching facilities associated with area supply substations. The system combustion turbine generators and various NUGs are also connected directly to the regional supply system.

Most of the regional supply work planned for 1995 and 1996 is required to provide additional capacity, meet regulatory requirements, improve safety or replace deteriorated equipment to prevent a decrease in the reliability of supply.

The estimated Regional Supply capital expenditures for 1995 and 1996 are $36.6 million and $36.0 million, respectively, and those for the 1995-1999 period are $197 million. This year's estimate of 1995 expenditures is $2.2 million less than last year's estimate of $38.8 million and for 1996 is $14.0 million less than last year's estimate of $50.0 million. This year's estimate of total 1995-1999 expenditures is $39.7 million less than last year's estimate.

The primary reason for the decreased cost for 1995 and 1996 is due to: lower than expected load growth; changes in schedules due to siting difficulties; project deferrals, cancellations and scope changes instituted by the Division project teams; and a decrease in the unidentified category estimates.

Appendix C contains maps of the regional supply system. Facilities that will be placed in service in the 1995-1999 five-year period are shown in red.

Table 7-1 summarizes these additions.

TABLE 7-1
SUMMARY OF REGIONAL FACILITY ADDITIONS

	1995	1996	1997	1998	1999	Total 1995-1999
Added Transformer Capacity (MVA)	0	150	1200	0	600	1,950
Lines (Circuit Miles)						
New	16.2	3.4	5.3	1.8	30.2	56.9
Rebuilt/Reconductored	47.4	79.9	55.1	64.9	80.0	327.3

B. MAJOR REINFORCEMENTS

Major reinforcements, for which funds are budgeted during the 1995-1999 five-year period, include projects required to provide additional capacity and projects to maintain the standard quality of service. Additional capacity will be provided by installing transformation at one existing substation (Hummelstown 230-69 kV in 1996) and at each of three new substations (West Hempfield 230-138 kV in 1996, South Akron 230-138 kV in 1996, Lackawanna 230-138 kV in 1999), and by providing additional transmission line capacity. Projects to maintain the standard quality of service include establishing two-way supply to several major area substations and

rebuilding obsolete and deteriorated lines which have higher than acceptable failure rates.

Substation Reinforcements

In the Susquehanna Division, relaying upgrades are planned for Berwick Substation in 1998, the replacement of control cables and upgrade of relay and control facilities at Sunbury Substation are planned for 1999, and protection improvements at Fishbach Substation are planned for 1999.

In the Northeast Division, a 230-138 kV substation is planned at Lackawanna in 1999. This substation will facilitate the elimination of Peckville 230-69 kV Substation and is part of the overall Scranton Regional Reinforcement plan. A new 230-138 kV substation at Jenkins in 2000 will provide a second 138 kV supply source to the Scranton Region.

In the Harrisburg Division, the 69 kV relay and control facilities at Carlisle Substation are scheduled for modernization/replacement in 1995. In 1996, the Hummelstown 75 MVA transformer 3 will be replaced with a 150 MVA transformer to provide additional capacity to supply the increasing load in this area of the division. Also at Hummelstown 230-69 kV Substation, transformer 1 will be reconnected from the Dauphin 230 kV line to its own double breaker arrangement in 1997 to provide additional reliability and capacity in the Harrisburg east area.

In the Lancaster Region, 230-138 kV substations will be established at West Hempfield and South Akron in 1996. Protection and control equipment will be upgraded to modern standards at South Akron in 1997.

Line Reinforcements

Major line reinforcement projects are included in the 1995-1999 program to maintain

adequate capacity and reliability in the regional system.

Four line reinforcements are planned for the Susquehanna Region:

1. Reconstruction of 3.2 miles of the Clinton-Muncy 69 kV Line to double circuit is planned for 1995 to provide adequate capacity and ensure reliable supply to the Muncy and Hughesville Area.

2. The 25.7 mile Lycoming-Lock Haven 1 and 2 Lines will be reconstructed in two sections during 1997 and 1998. Existing line facilities are deteriorated and will require replacement to ensure reliable supply to the Lock Haven Area and eliminate single contingency overload concerns.

3. The Frackville-Fishbach #3 69 kV Line will be reconstructed in 1998 to eliminate limiting conductor sections in order to provide adequate capacity for the load in the Fishbach Area.

4. The 5.7 mile section of the Eldred-Pine Grove Line from Eldred to Hegins will be reconstructed in 1999 to provide adequate capacity for the southern Schuylkill area.

Seven major line reinforcement projects are planned for the Northeast Division:

1. The Hoffman-Minooka Line will be replaced with a new double circuit line in 1994. The double circuit line will provide additional capacity and voltage support to the Scranton region and eliminate the limiting conductor portion of the double circuit path from Jenkins through Scranton to Lackawanna.

2. The East Palmerton-Wagners 69 kV Line will be reconstructed for double circuit operation in 1995 and 1996 to maintain acceptable voltage levels

and provide needed additional load supply capacity for the western Pocono area.

3. The first three miles of the Lackawanna-Scranton #1 and #2 Lines will be rebuilt in 1996. Reconstructing these lines will eliminate limiting conductor sections in order to provide adequate capacity for the load growth in the Scranton region and provide a necessary path for the future conversion to 138 kV operation and the elimination of Peckville Substation.

4. The Jenkins-Minooka #1 and #2 Lines will be upgraded for 138 kV construction in 1997 to complete the double circuit high capacity path from Jenkins to Lackawanna needed for the conversion to 138 kV operation in 1999-2000.

5. The Lackawanna-Peckville #1 Line will be rebuilt for double circuit operation in 1998 to provide the two 69 kV lines needed to supply the Peckville-Varden and Peckville-Gouldsboro Lines upon elimination of Peckville Substation.

6. The Lackawanna-East Carbondale Line will be reconstructed to double circuit operation in 1999 to prevent single contingency line overloads and low voltage conditions.

7. The Jenkins-Harwood #1 Line from Jenkins to Wlikes Barre Substation will be reconstructed in 1999 to provide additional capacity for supply to Wilkes Barre and vicinity.

Five line reinforcement projects are planned for the Lehigh Region:

1. The Siegfried-Wescosville #2/Wescosville-Crackersport double circuit line between Wescosville and the Trexlertown Tap will be reconstructed in 1995 to provide additional capacity to prevent overloads for single contingency outages.

2. The 4 mile Hosensack-Upper Hanover 69 kV single circuit line between Hosensack and Upper Hanover Substation will be rebuilt for double circuit in 1995. This project will eliminate the exposure to contingency overloads for the loss of the Hosensack or Buxmont source.

3. The Siegfried-Hauto #1 and #4 69 kV Lines will be reconductored in 1995 and 1997, respectively, to eliminate the limiting conductor sections to provide additional capacity to supply load in the Hauto Area.

4. The 12 mile Wescosville-Siegfried #1 and #2 69 kV Lines will be converted to 138 kV operation by November 1999. This will require constructing 2.1 miles of new 138 kV double circuit line at Wescosville Substation, converting Schnecksville Tap to 138 kV operation, and converting three area supply substations to 138-12 kV operation and one 69 kV customer to 12 kV operation. The remainder of the line is already built for 138 kV operation. This project will eliminate the exposure to contingency overloads on the 138-69 kV transformer at Wescosville Substation and the 230-69 kV transformers at Siegfried Substation by transferring the associated load to the 138 kV system. It will also reinforce the 138 kV network by creating a double circuit 138 kV loop between Siegfried and Wescosville Substations.

5. A 12 miles section of line between Seidersville and Quakertown will be constructed in 1999 to improve supply to the Richland and Quakertown area.

Five line reinforcement projects are planned for the Harrisburg Region:

1. The 9.2 mile double circuit section of the West Shore-Carlisle #1 and #2 69 kV Lines between Mechanicsburg and Carlisle Substation will be reconductored/reconstructed in 1995 and 1996 to prevent normal and single contingency overload conditions.

2. The deteriorated facilities on the West Carlisle and Mt. Rock Tap Lines will be replaced from 1995 to 1998 to provide increased reliability of supply to customers in the West Carlisle Area. The wood structures on these lines have deteriorated to the point where reliability of supply is a concern.

3. A 1.3 mile section of the West Shore-Harrisburg 1 & West Shore-Cumberland 1 69 kV lines between West Shore Sub & White Hill Taps will be reconductored with higher capacity conductor in 1997 to prevent single contingency overloads.

4. A 9.3 mile section of the Juniata-Richfield 69 kV line between Newport and Thompsontown Substation will be rebuilt in 1998 to provide adequate load supply capacity.

5. A 3.2 mile section of the double circuit West Shore-Harrisburg #1 and #2 69 kV Lines between Rosemont and Harrisburg Substations will be rebuilt in 1999 to prevent single contingency overloads.

Eight line reinforcement projects are planned for the Lancaster Region:

1. The 1.5 mile section of the former Met-Ed 821/822 line between Berks Substation and the State Hill Tap will be rebuilt, and the second circuit will be installed on the State Hill Tap in 1995 to provide two-line supply to State Hill.

2. In 1996, the 3.2 mile section of the West Hempfield-Hummelstown 69 kV Line between North Columbia Tap and Donegal Substation will be rebuilt to supply growing load in the northwestern corner of Lancaster Region.

3. The 10 mile section of the South Akron-Morgantown #2 69 kV Line from the Kinzer 13 Tie to Morgantown will be reconductored in 1996 to supply new loads in the Morgantown Area.

4. In 1996, 25 miles of 69 kV line will be converted to 138 kV operation to supply growing loads in the central core of the Lancaster Region. Conversion to 138 kV operation will double the capability of these lines.

5. The 11 mile section of the South Akron-Morgantown #1 69 kV Line from the Earl #1 Tap to Morgantown Substation will be reconductored in 1998 to supply new loads in the Morgantown Area.

6. A 1.6 mile 69 kV tie line will be constructed between the Kellogg Taps and Landisville Substation in 1998 to reinforce transfer capability between South Manheim and West Hempfield substations to supply the loads during outages of 230-69 kV transformers.

7. The 7.8 mile Morgantown 2-Kinzer 13 Tie will be reconductored in 1998 to reinforce back-up supply to the loads in the southern portion of the Lancaster Region for a double circuit line failure of the Face Rock-Kinzer Line.

In addition to the regional line reinforcement projects, 5 area supply substations will be connected to the regional supply system in 1995 and 1996. An additional 7 substations will be connected from 1997 through 1999.

C. PROGRAM TO UPGRADE THE 69 KV CAPACITOR BANK CONTROLS AND PROTECTION SCHEMES

As a follow-up to the PCB Capacitor Bank Replacement Program, the 69 kV capacitor bank controls and protection schemes will be upgraded. This program has an estimated total cost of approximately $0.9 million for the 1995-1999 period. The new control and protection schemes will provide improved capacitor bank reliability and will eliminate voltage transient conditions that can decrease capacitor can life and degrade voltage quality.

D. AIR BREAK SWITCH CONVERSION PROGRAM

The System Operating Department has identified a number of air break switches on the regional supply system that are not equipped with parallel break interrupters, but are sometimes required to break parallel current. A program has been established to modify or replace a significant number of these switches. The existing air break switches are not rated for parallel break capability and operating integrity may be compromised with the continued use of air break switches to break parallel current. Approximately 19 switches will be modified or replaced in 1995 and 1996 at an estimated cost of $0.3 million.

E. LAMINATED WOOD UPSWEPT ARM REPLACEMENTS

Laminated wood upswept arms were purchased during the early 1970s for use on regional 69/138 kV lines. A program began in 1992 to replace a significant number of these wood upswept arms which have deteriorated. The deterioration lessens the mechanical strength of the arms and has resulted in some arm failures on the PP&L system. Recent analysis has shown that the deterioration is not as serious as first anticipated and the program has been adjusted accordingly.

The deteriorated laminated wood arms will be replaced with the current standard upswept steel arms. Arm replacement work has been budgeted at $0.5 million per year.

F. LOWER STRUCTURE GROUND RESISTANCE

The performance of some 69 kV and 138 kV circuits during T&L has been less than desirable. A program to improve performance by installing counterpoise to reduce structure ground resistance to minimize the number and frequency of flashovers on double circuit lines was begun in 1992 and is scheduled to continue through the 1995-1999 period. Supply lines to a number of large customers have been tested and modified with positive results. Structure ground resistance reduction work has been budgeted at $1.6 million for 1995-1999.

G. CAPITAL REQUIREMENTS

Capital requirements for development of the regional supply system in the five-year period, 1995-1999, are projected to be $198 million (escalated). The capital requirement for the first two years, 1995-1996, is $73 million. The estimated capital requirement for the following three years, 1997-1999, is $125 million. Table 7-2 at the end of this chapter summarizes the capital requirements for the five-year period.

During the five-year period, 1995-1999, approximately $148 million (75%) is required for capacity reinforcement projects due to load growth, and $49 million (25%) is required for system reliability projects which include improvements, relocations, regulatory requirements, NUG, and for the elimination, replacement or upgrade of deteriorated equipment.

TABLE 7-2
SUMMARY OF REGIONAL SUPPLY CAPITAL REQUIREMENTS

Project	Million $'s Escalated 1995	1996	1997	1998	1999	Total 1995-1999
Substation Projects						
Hummelstown (Transformer)	0.2	1.6	0.7			2.5
Lackawanna (New)	0.2	0.7	3.8	4.3	0.3	9.3
So. Akron (New)	4.4	5.0				9.4
W. Hempfield (New)	3.1	6.6				9.7
Jenkins (New)		0.1	0.3	0.2	1.1	1.7
Springfield (New)				0.5	1.1	1.6
Fishbach (Upgrade)				0.1	0.6	0.7
Berwick (Upgrade)				0.7		0.7
Sunbury (Upgrade)		0.1	0.3	2.5	1.3	4.2
Conestoga (Upgrade)			0.3	0.5	4.0	4.8
So. Akron (Upgrade)				0.1	1.0	1.1
Major Line Projects						
Frackville-Fishbach #3			0.2	1.4		1.6
Girardville Tap			0.2	0.2	0.7	1.1
Eldred-Pine Grove	0.1	0.1	0.7	1.2	1.7	3.8
Clinton-Muncy	1.1					1.1
Lycoming-Lock Haven #1&2	2.8	1.2	5.5	5.1		14.6
Fishbach-Pine Grove		0.1	0.1	0.7	1.3	2.2
Hoffman-Minooka	3.3					3.3
Lackawanna-Peckville #1		0.1	0.1	1.8		2.0
Jenkins-Minooka #1&2	0.2	0.4	0.6			1.2
Lackawanna-East Carbondale		0.1	0.4	0.1	3.2	3.8
Jenkins-Harwood #1	0.1	0.3	0.7	1.3	2.1	4.5
East Palmerton-Wagners	3.6	2.0				5.6
Seidersville-Quakertown	0.8	1.4	3.9	7.3	2.9	16.3
Wescosville-Siegfried #1&2	0.3		2.9	4.0	1.0	8.2
Ridge Road Tap	1.7					1.7
Siegfried-Hauto #4		0.1	1.0			1.1
Henryville Tap	0.2	0.3	2.4			2.9
West Shore-Carlisle #1&2	3.0	0.8				3.8
West Shore-Harrisburg 1&2	0.1	0.1	0.1	1.6	3.2	5.1
West Carlisle & Mt. Rock Taps	0.6	0.5	0.6	0.3		2.0
Juniata-Richfield	0.1	0.3	1.8	1.4		3.6
West Hempfield-South Manheim #1&2	0.1	1.5				1.6
Penn Castings-Kellogg Tap	0.2	0.4	0.2	0.5		1.3
South Akron-Earl	0.2	0.2	2.0	2.1	6.5	11.0
South Akron-Morgantown #1&2	1.0	0.6	1.3	1.1		4.0
New Morgan Tap	0.2	0.2	0.1	1.0		1.5
821/822 Line	1.1					1.1
West Hempfield-Hummelstown	0.9	0.8				1.7
Engleside-South Akron	0.2	2.2				2.4
Other Specific Projects	3.5	2.4	1.9	1.7	4.4	13.9
Pools	3.3	5.3	3.6	3.2	3.6	19.0
Unidentified	--	0.5	2.1	1.1	1.1	4.8
TOTAL	36.6	36.0	37.8	46.0	41.1	197.5

CHAPTER 8

AREA SUPPLY

CHAPTER 8
BUDGET DISCUSSION - AREA SUPPLY

A. GENERAL DISCUSSION

The Area Supply System links the regional supply system to the customer's point of delivery. Area supply facilities include 69-12 kV and 138-12 kV substations, 12 kV lines, 23 kV and 4 kV systems, and the 120/208 volt Low Tension Networks.

Most of the area supply work planned for 1995 and 1996 is required to provide additional capacity, to meet OSHA, EPA or other regulatory requirements, to improve the safety of the workplace or to replace excessively deteriorated facilities in order to prevent a decrease in reliability of supply. Reliability of supply will also be improved inherently by: having more substation sources to supply the distribution system; adding 12 kV lines at new and existing substations; converting 4 kV systems to 12 kV; and reconstructing distribution facilities to meet modern standards of performance and appearance.

As the area supply system grows older, many facilities are approaching the end of their useful lives. Work has begun in recent years to replace or upgrade deteriorated and obsolete facilities. Several projects involving the replacement or modernization of old and outmoded facilities, LTN vault reconstruction projects systemwide, and the replacement of deteriorated underground cables are included in this budget.

The estimated Area Supply capital expenditures for 1995 and 1996 are $48.3 million and $46.6 million, respectively, and those for the 1995-1999 period are $239.4 million. This year's estimate of 1995 expenditures is $5.6 million less than last year's estimate of $53.9 million and for 1996 is $5.9 million less than last year's estimate of $52.5 million. This year's estimate of total 1995-1999 expenditures is $8.2 million over last year's estimate. The decreased cost for 1995and 1996 are a result of project deferrals (lower than expected load growth), project changes (cancellations, deferrals, scope changes, reduced cost estimates) resulting from reviews by the division project

teams, and a reduction in the underground cable replacement program. The increase over the five year period is due to newly identified projects in the later years and elimination of the $4 million underspending adjustment.

B. IDENTIFIED PROJECTS

1. New Substations

New substation projects will provide additional capacity to supply existing and future loads, will improve reliability by providing additional 12 kV sources and shorter 12 kV lines, and will economically provide adequate voltage and protection on the distribution system.

Four new 69-12 kV substations are scheduled and budgeted for 1995. Provisions are also being made for engineering three new 69-12 kV substations for a 1996 completion. A total of $7.0 million is budgeted for new or rebuilt substations in 1995 and 1996.

In addition to the 1995-1996 program outlined above, 9 more new substations are estimated to be required by 1999 to supply increasing loads, 12 substations are scheduled to be converted from 69-12 kV operation to 138-12 kV operation and funds are budgeted for 20 substation reinforcement projects.

2. New 12 kV Lines and Terminals

New 12 kV lines and terminals are required to provide additional capacity to supply existing and future loads. They increase load transfer capability, improve voltage regulation, allow improved protection arrangements on the distribution lines, improve reliability by reducing 12 kV line exposure, and reduce line losses through lower average facility loading.

A total of 34-12 kV circuit breaker line terminals and associated line connections will be installed at new and existing area supply substations in 1995 and 1996.

Of the total, 17 line terminals costing $5.2 million will be installed at existing area supply substations, and 17 line terminals will be installed at new 69-12 kV substations in 1995 and 1996 (costs for the 12 kV line terminals at new 69-12 kV substations are included in the total costs for new substations).

3. Reconductoring/Reconstruction, Additional Phase Conductors, Miscellaneous Tie Lines

These projects are required to provide additional capacity in the distribution system to supply existing and future loads. Inherent benefits of providing this capacity are improved reliability and improved voltage conditions. Some of these projects are being installed solely to bring voltage levels to within acceptable limits or to provide load relief for overloaded protective devices. A total of $10.6 million has been included for these projects in 1995 and 1996.

4. 4-12 kV Conversions

Approximately $1.8 million in 1995 and 1996 is budgeted for converting 4 kV distribution systems to 12 kV.

Many 4 kV systems have become severely deteriorated over the years and many of the facilities are approaching the ends of their useful lives. Replacement parts are becoming increasingly difficult to obtain.

Conversion of these systems will eliminate non-standard construction, provide a modern rebuilt distribution system, eliminate unnecessary transformations, reduce maintenance costs and also reduce distribution system losses. Current plans call for completion of the 4 kV conversions systemwide by 1997.

5. Low Tension Networks

This category includes specific projects which have been identified in the low-tension networks for additional capacity and reliability. A total of $5.5 million is budgeted for 1995 and 1996 for these projects.

A Low-Tension Network Rehabilitation Program is included in the above dollars to correct structural integrity, reliability, and OSHA and PP&L safety standards problems. Projects to correct major deficiencies have been identified and have been included in the Construction Program. Other newly identified projects in this category will be included in the Construction Program on an "as-required" basis.

C. AREA POOL ITEMS

1. Relocations Due To Right-Of-Way Requirements

Provision has been made for total expenditures of $8.1 million in 1995 and 1996 for relocations due to right-of-way requirements, about $4.0 million in 1995 and $4.1 million in 1996. This item is credited with reimbursement payments, and the net amount charged during any one calendar year can vary greatly from budget.

2. Replacement of Deteriorated Underground Distribution Cables

A total of $4.9 million is the current estimate of funding required for 1995 and 1996 for the replacement of deteriorated underground distribution cables. Approximately $2.4 million is budgeted in 1995 and $2.5 million in 1996.

3. Replacement of Deteriorated Copperweld Conductor

A total of $1.1 million is budgeted for Copperweld conductor replacement in 1995 and 1996. Approximately $0.5 million is budgeted in 1995 and $0.6 million in 1996.

4. 69-12 kV and 138-12 kV Transformer Requirements

Transformer requirements are budgeted on an "as required" basis and these units are purchased and delivered according to required in-service dates. A total of $0.4 million is budgeted in 1996 for 69-12 kV transformers and $2.7 million in 1995 and $1.1 million in 1996 for 138-12 kV transformers.

5. Power Circuit Breakers

The $0.7 million total allocated for 1995 and 1996 includes the purchase of all power circuit breakers for use at all new area supply substations, as well as additional terminals at existing area supply substations. Approximately $0.2 million is budgeted in 1995 and $0.5 million in 1996.

6. Area Supply Improvements

A total of $1.6 million for 1995 and 1996 is allocated for Area Supply improvements which cover a number of minor miscellaneous distribution reinforcement projects for which specific budget items are not necessary. Approximately $0.8 million is budgeted in 1995 and $0.8 million in 1996.

A pool item is included for the repair of failed 69-12 kV power transformers that are capitalized. Approximately $0.4 million is allocated annually for these repairs in 1995 and in 1996.

A pool item is included for the replacement of Low Tension Network primary cables. These cables were generally installed in the 1960's and early 1970's and are expected to have a service life of 20 to 25 years. A total of $0.1 million is allocated for 1995 and $0.1 million for 1996.

D. AREA BLANKET ITEMS

The funds for each division's portion of each blanket are authorized separately. This

assures accountability for blanket spending at the division level.

1. Pole Replacements 23 kV and Under

   A total of $7.9 million has been allocated for 1995 and 1996 for pole replacements at 23 kV and under. About $3.9 million is budgeted in 1995 and $4.0 million in 1996. It is estimated that approximately 3000 poles on the system will require replacement in 1995 due to deterioration. Those poles which must be replaced due to motor vehicle breakage are included in Distribution Department-Storms and Emergencies.

2. Distribution Capacitor Program

   The distribution capacitor program is part of the total system reactive supply and voltage support program. Its aim is to supply all area supply reactive loads and losses from within the area supply system while maintaining adequate voltage levels on the distribution lines. This is accomplished entirely with 12 kV shunt capacitors. About 70 MVAR of capacitors are required per year in 1995 and 1996 to attain an average of unity power factor at peak load on the high side of the 69-12 kV and 138-12 kV transformers at area supply substations. Capacitors will also be purchased in 1995 and 1996 for capacitor failures.

   A total of $0.8 million has been allocated for the installation of capacitors in 1995 and $0.8 million in 1996.

3. Oil Circuit Reclosers

   The allocation for OCRs is $1.4 million for 1995 and $1.4 million for 1996. In addition to installing new units, this budget item includes replacing worn out, damaged, overdutied or overloaded oil circuit reclosers on the distribution system. This work maintains service continuity, facilitates operation and maintenance, and reduces operating costs.

4. Distribution Department Minor - Lines

A total of $4.9 million is budgeted for 1995 and $5.0 million for 1996 for minor line items in the Distribution Department. This work includes minor additions and replacements of distribution line facilities required to facilitate maintenance and operation, to meet increased demand due to system load growth, to reduce operating costs and to maintain or upgrade reliability to acceptable levels.

5. Distribution Department Minor - Substations

This blanket is budgeted for a total of $0.3 million in 1995 and $0.3 million in 1996. This item provides funding for minor additions and replacements of distribution substation facilities. This work is required to facilitate operation and maintenance, reduce operating costs, and to maintain or upgrade reliability to acceptable levels.

6. Distribution Department - Storms and Emergencies

This blanket is budgeted for a total of $2.7 million in 1995 and $2.8 million in 1996. This item covers all expenditures which can be classified as non-discretionary--in other words, those projects which are caused by forces outside the control of the division. This includes storms, relocations, and damage to facilities caused by motor vehicles.

7. Distribution Department - Install MOVs and MOVEs at Specific UG Cable Locations

This blanket is designed to significantly extend the life expectancy of underground (UG) cable by applying metal oxide varistors (MOVs) to underground development terminal poles and metal oxide varistor elbows (MOVEs) at normally open points on UG cable installations. The application of the MOVs and Elbow arrestors will provide improved surge protection which extends underground cable life by limiting the severity of overvoltages and retarding further cable degradation due to fault

tree growth. Total funding for 1995 and 1996 is $1.6 million. Approximately $0.8 million is budgeted in 1995 and $0.8 million in 1996.

8. Distribution Department - Replace Failed and/or Deteriorated, Non-Repairable Equipment

   This program covers failed and deteriorated distribution equipment and allows improved tracking of the costs of these failures. Total funding for 1995 and 1996 is $2.1 million ($1.0 million in 1995 and $1.1 million in 1996).

9. Distribution Department - Foreign Utility Work

   This item separates work requested by foreign utilities from the Storm and Emergency blanket to provide improved tracking. Total funding for 1995 and 1996 is $1.8 million ($0.9 million in 1995 and $1.0 million in 1996).

E. CAPITAL REQUIREMENTS

TABLE 8-1
AREA SUPPLY EXPENDITURES
$ MILLIONS - ESCALATED

	1995	1996
New, Rebuilt and Modified Substations	7.3	8.2
Additional Lines & Terminals	1.9	3.2
Lines: Reconductor/Reconstruct/Add'l. Phases	6.8	3.8
4-12 KV Conversions	1.4	0.4
Low Tension Networks (incl. 4-12 KV convs.)	2.9	2.6
Area Pool Items:		
Relocation Due to R/W Req.	4.0	4.1
Replacement of Deteriorated UG Cable	2.4	2.5
Purchase 69-12 KV and 138-12 KV Xfmrs.	2.7	1.5
Purchase Power Ckt. Breakers	0.2	0.5
Replace Deteriorated Copperweld Conductor	0.5	0.6
Other Pool Items	1.5	1.6
Area Blanket Items:		
Pole Repls. - 23 KV & Under	3.9	4.0
Capacitors - 23 KV & Under	0.8	0.8
Oil Circuit Reclosers	1.4	1.4
Distr. Dept. Minor - Lines	4.9	5.0
Distr. Dept. Minor - Subs	0.3	0.3
Distr. Dept. - Emerg./Requested Changes	2.7	2.8
Distr. Dept. - Foreign Utility Work Program	0.9	0.9
Distr. Dept. - MOV's and Elbow Arrestors Installation	0.8	0.8
Distr. Dept. - Replace Failed Equipment	1.0	1.1
Unidentified		0.5
TOTAL (Escalated)	48.3	46.6

The above Table 8-1 details the Area Supply expenditures required in 1995 and 1996.

In a less detailed format, the following Table 8-2 shows the expenditures for Area Supply facilities for the 1995-1999 period:

TABLE 8-2
AREA SUPPLY EXPENDITURES
$ MILLIONS - ESCALATED

	1995	1996	1997	1998	1999	Total 1995-1999
Specific Identified Projects	20.3	18.2	16.5	18.4	15.2	88.6
Area Pool Items	11.3	10.8	10.9	12.4	13.1	58.5
Area Blanket Items	16.7	17.1	17.7	18.2	17.8	87.5
Unidentified	--	0.5	2.1	1.1	1.1	4.8
TOTAL	48.3	46.6	47.2	50.1	47.2	239.4

CHAPTER 9

REVENUE

CHAPTER 9
REVENUE EXPENDITURES

Items classified as "revenue work" include line extensions specifically built to connect new loads, street lighting installations, and the purchase of distribution transformers and meters. The estimated costs for items included in the revenue category are primarily based on statistical analysis of general information rather than specific identified load additions. Included in the analysis are forecasts of new construction activity and estimates of new dwelling units to be added, supplied by Rates and Market Research; and on historical per customer cost information for the different categories, provided by the Distribution Department.

"Revenue Work" is performed by the same division personnel that handle the various area supply capital projects. Revenue work is very sensitive to the numbers of new dwelling units to be connected in an area, and thus is highly variable and localized. Since it is regarded as having the highest priority, it is often performed ahead of and frequently to the exclusion of other capital area supply projects. Large overbudget expenditures in "revenue work" tend to result in underexpenditures and delays in completing various area supply capital projects.

Initiatives were implemented in 1992 to better understand the nature of the costs classified as revenue expenditures and ways to control them effectively. Also, to promote further control, a conscious decision was made to not budget certain uncertain costs. For example, rather than reflecting all possible street lighting costs, only likely costs were budgeted. Other costs would be given unbudgeted approval if appropriate.

The result was establishing a target amount for revenue expenditures of $80 million in 1992. Consistent with this approach to budgeting for 1992, the annual expenditure projections for the subsequent four years were capped at the same $80 million per year level.

Actual expenditures as of August 31, 1994 were $57.4 million. It is expected that the total 1994 expenditures may exceed the $80 million target.

Based on the present forecasts of construction activity, estimates of new dwelling units and the initiatives applied in 1992, the $80 million target is going to continue to be applied for revenue expenditures in 1995 and the subsequent four years. It is recognized, however, that there is some exposure to exceeding this amount pending an analysis of the root cause(s) of 1994 overspending and the resolution of workforce restructuring studies.

Power Conditioning Program

A new program was added to the 1994-1995 Budget. It was a proposed program that would offer our customers a power conditioning service. This service would meet customer's power conditioning needs by addressing problems and concerns including surge protection and voltage fluctuations. Earlier this year, a business plan was completed for that program. The results indicated fewer potential customers and a conclusion that such a program would be more appropriately included within an unregulated subsidiary. A case involving, in part, the regulated/unregulated character of a similar program proposed by another Pennsylvania utility is currently pending before the PUC. Based on the conclusion of the business plan, funds are no longer included in the Revenue category for this program; however, pending PUC action, an item is included in the chapter outlining "Potential Capital Expenditures Not Included in the Base Capital Plan" (Chapter 11) to indicate the possibility that funding from within the regulated environment may be required.

The following Table 9-1 shows the budgeted expenditures for Revenue work for the 1995-1999 period:

TABLE 9-1
REVENUE EXPENDITURES
$ MILLIONS - ESCALATED

	1995	1996	1997	1998	1999	Total 1995-1999
69 KV Revenue Extensions	1.2	1.2	1.2	1.2	1.2	6.0
12 KV Revenue Extensions						
Specific ER's	11.3	11.3	11.3	11.3	11.3	56.5
Subordinate ER's and WO's	46.0	46.0	46.0	46.0	46.0	230.0
Street Lighting	3.0	3.0	3.0	3.0	3.0	15.0
Distribution Transformers	14.0	14.0	14.0	14.0	14.0	70.0
Meters	4.5	4.5	4.5	4.5	4.5	22.5
TOTAL	80.0	80.0	80.0	80.0	80.0	400.0

CHAPTER 10

GENERAL BUILDINGS & OTHER CAPITAL

CHAPTER 10
BUDGET DISCUSSION
GENERAL BUILDINGS AND OTHER CAPITAL

A. GENERAL DISCUSSION

This chapter discusses the capital projects identified and budgeted in the General Buildings category, and all other capital expenditures not covered in previous chapters. Table 10-1 shows a breakdown of these expenditures for the 1995-1999 *five-year period for each segment of this category.*

B. GENERAL BUILDINGS PROGRAM

The building category includes all the facilities required to replace old deteriorated buildings requiring major repairs; to comply with OSHA regulations; to provide adequate space to meet personnel requirements; and to correct inefficient work operations. Included are all building projects other than those located at existing generating plants and bulk power substations. The buildings at the generating plants (including Transportation and Construction Department buildings) are included and identified in the lists of projects which support Chapter 4 - Existing Generation Nuclear and Chapter 5 - Existing Generation Fossil and Hydro.

As described in Chapter 1, target expenditure and manpower levels have been established for preparation of the 1995 and 1996 Capital Budgets and the 1995-1999 Capital Construction Program in order to promote stable and competitive rates. Consistent with the strategies discussed in Chapter 1, buildings projects are scheduled based on consideration of the consequences of deferral and the need for coordination among projects. For buildings projects, the scheduling of projects is over a ten-year horizon and includes expenditures at Susquehanna SES, existing fossil and hydro stations and substations. Those projects are, as noted above, budgeted within those specific categories.

TABLE 10-1
BREAKDOWN OF GENERAL BUILDINGS
AND OTHER CAPITAL BY CATEGORY
$ MILLIONS - ESCALATED

	1995	1996	1997	1998	1999	Total 1995-1999
GENERAL BUILDINGS						
o Major Projects - Div. Oper.	5.2	4.9	6.3			16.4
o Minor Projects - Div. Oper.	2.3	0.6				2.9
o System Facility Center	0.8					0.8
o General Office Complex	3.1	1.7	2.3	2.4	2.3	11.8
o Land Management	0.3	0.2				0.5
SUB-TOTAL	11.7	7.4	8.6	2.4	2.3	32.4
ADJUSTMENT	(1.8)	(1.1)	(1.3)	(0.4)	(0.3)	(4.9)
TOTAL	9.9	6.3	7.3	2.0	2.0	27.5
OTHER CAPITAL						
o Sites & Right-of-Way	0.7	0.7	0.7	0.8	0.8	3.7
o Computer Software	39.8	55.5	30.5			125.8
o General/Miscellaneous	7.1	6.7	7.7	6.8	6.9	35.2
TOTAL *	47.6	62.9	38.9	7.6	7.7	164.7

NOTE:

* Excludes rounding adjustment.

A total of $10.1 million is budgeted in 1995 and $6.3 million in 1996. For the 1995-1999 five-year period, $27.6 million is estimated.

1. DIVISION OPERATIONS

a) Major Projects

In June, 1993 the Hazleton Facilities Utilization Team completed their study and presented recommendations regarding the disposition of the South Poplar Street facility and establishing a Hazleton Service Center for the Hazleton Operating Area. The recommendation of the team, which has been accepted, was to renovate and expand the South Poplar Street facility for use as the Hazleton Service Center. The estimated total cost of the project is $5.4 million. This project was originally scheduled for completion in 1996, but its start has been delayed pending the outcome of restructuring studies. Its current completion date is in 1997 pending the outcome of the restructuring studies

Two other major projects appearing in the 1995-1996 period are the Hamlin Service Center and the Schuylkill Area Service Center. These projects are also on hold pending the completion of restructuring studies.

The Hamlin project is a replacement of the existing Hamlin Service Center which no longer supports the workload in the Pocono region. The Schuylkill project reflects a reconfiguration and consolidation in that area recommended in a local workforce analysis conducted in 1992.

TABLE 10-2
Major Projects - Division Operations
$ Millions (Escalated)

	1995	1996	Project Total	Expected Completion Date
Hazleton Service Center	2.2	2.4	5.4	1997
Hamlin Service Center	3.0		3.1	1995
Schuylkill Area S.C.		2.5	2.5	1996

b) Other Projects

In addition to the major projects outlined above, modifications, additions, replacements, and improvements to existing facilities, are budgeted at $2.3 million in 1995.

2. System Facilities Service Center

The first phase of the System Facilities Service Center in the Humboldt Industrial Park located near Hazleton, which is occupied by the Chem Lab and Test Department, was completed in 1992 at a cost of $14.0 million.

The second phase of the project began in 1992 and was occupied in the third quarter of 1993 by the Meter and Stores Departments. Total cost of this phase is $8.0 million.

The third and final phase of the System Facilities Service Center will include the system transformer repair operations and Construction Department. It began in 1993 and is scheduled to be completed in the 4th quarter of 1994 at a cost of $17.0 million. Final work and moving are scheduled for early 1995.

3. General Office Complex

Continuing renovations and improvements have been included in the budget for the General Office Complex. A number of projects have been identified in the Tower Building and North Building. A total of $3.1 million is budgeted in 1995 and $1.7 million in 1996.

4. Land Management Facilities

This budget category includes capital additions, improvements, and replacements at the Company's recreational facilities such as Holtwood, Lake Wallenpaupack, and Montour Preserve. One large project is identified and included in the budget. It is an addition to the visitor center planned at the Montour Preserve facility scheduled for completion in 1996 at $230,000.

An additional amount of $120,000 is budgeted in 1995 for demolition of buildings at Holtwood Village.

C. OTHER CAPITAL

This category consists of numerous projects that are not directly a part of Electrical or Production facilities. The projects fall under the general headings of Telecommunications, SCADA, Furniture, Tools, Computer Software, and Retirements.

1. Sites and Rights-of-Way

The expenditures for sites and rights-of-way are estimated at $0.7 million in 1995 and $0.7 million in 1996 with a total of $3.8 million for the 1995-1999 period. The estimated amount for this budget category has been reduced as compared to previous estimates because the siting and R/W costs for Bulk Power projects, Regional Supply and site acquisitions for new Area Supply substation projects

have been included in each project estimate rather than summarized under this item.

The funds budgeted are for additional land requirements at existing generating plants, service center locations, and minor line rights-of-way.

2. Capitalization of Computer Software

This category includes computer software costs that have been designated as capital projects. Two large programs are included in the budget for 1995. They are:

a. Nuclear Information Management System

The proposed system would be a department-wide integrated information system providing easier and more efficient data access, and support most department's work processes. NIMS is a key element of the Nuclear Department's Information Management Strategic Plan (IMSP). Total estimated capital cost of the system is $24.8 million with a completion date of 1997. $9.3 million is budgeted in 1995.

b) Division Operations SIGHT Project

The SIGHT Project has three major computer systems being developed. They are the replacement of the Customer Information System, developing Support Information Systems (Automated Mapping/Facilities Management/Geographical Information), and an integrated Work Management System. Estimated capital cost of this project is $106.3 million with a completion date of 1997. In 1995, $30.5 million is budgeted and $46.8 million is budgeted for 1996.

3. Miscellaneous/Other

The remaining areas in the "other" category include purchase of office furniture and equipment, purchase of small tools and equipment, enhancements and small additions to the existing radio and telephone systems, the replacement of underground storage tanks, projects requiring small amounts to complete, research projects requiring capital expenditures, and other small items.

Estimated expenditures for these remaining portions of the "Other" category are $7.1 million for 1995 and $6.7 million for 1996.

CHAPTER 11

POTENTIAL CAPITAL EXPENDITURES NOT INCLUDED IN THE BASE CAPITAL PLAN

CHAPTER 11
POTENTIAL CAPITAL EXPENDITURES NOT INCLUDED IN THE BASE CAPITAL PLAN

A. SUMMARY

In addition to the capital construction budget of about $2057.3 million for the 1995-1999 period, there are potential capital expenditures not included in the base capital plan for the five-year period. Included are estimated expenditures for potential projects which may be required by the Company but are not included in the capital construction budget. Table 11-1 shows the potential capital expenditures by category, by year for the first five years and a total for the second five-year period (2000-2004).

B. CHANGES FROM LAST YEAR

1. NORTHERN PP&L REINFORCEMENT

A second 500-230 kV transformer would have been required at Susquehanna in 1997 if all of the proposed PP&L and NUG base load generation additions had materialized. The cost of this reinforcement was to be shared by PP&L and the NUG developers under the allocation terms of the Group 3 Joint Stipulation. Based upon the actual projects meeting the established milestones, it has been determined that the Northern PP&L Reinforcement will not be required in the five year period. It is, therefore, deleted from the list of potential capital expenditures.

C. POTENTIAL PROJECTS

1. PENNSYLVANIA DER RESIDUAL SOLID WASTE REGULATIONS, GROUND WATER PROTECTION, AND TOXICS REDUCTION

On July 4, 1992, Pennsylvania DER promulgated new residual solid waste regulations that impact existing and future ash disposal facilities at PP&L's coal-fired plants. Future disposal areas must be sited and designed according to strict

TABLE 11-1
POTENTIAL CAPITAL EXPENDITURES
NOT INCLUDED IN THE BASE CAPITAL PLAN
$ MILLIONS - ESCALATED

	1995	1996	1997	1998	1999	Total 1995-1999	Total 2000-2004
Potential Projects							
o Ash Disposal - DER Proposed Solid Waste Regulations, Ground Water Protection Policy, Toxics Reduction		2.5	4.3	1.0	38.2	46.0	31.0
o Clean Air Legislation - Exposures - Air Toxics, PM10							410.0
- NOx - Ozone - POSTRACT (1999)			10.0	50.0	40.0	100.0	
- POSTRACT (2003)							200.0
o Brunner Island/Martins Creek/Sunbury Cooling Towers							54.0
o Spare Generator Step-Up Transformer	3.0					3.0	
o Cable Limiter Retrofit	0.5	0.3				0.8	
o Power Conditioning Program	0.9	3.2	4.2	4.4	2.3	15.0	0.8
o Green Mountain Manufacturing Site	2.0	5.0	2.0			9.0	
TOTAL	6.4	11.0	20.5	55.4	80.5	173.8	695.8

specification and existing facilities must be repermitted by demonstrating compliance with environmental impact performance requirements. Non-conforming facilities must be taken out of service before July 4, 1997, and closed shortly thereafter with impervious caps and other abatement measures.

Martin's Creek Basin No. 4 and the Montour dry ash disposal facilities are expected to satisfy the regulations. However, the fly ash facilities at the other

plants, the bottom ash basins at all the plants, and the pyrites basins at Montour and Brunner Island will be retired and replaced.

In a related activity, ground water degradation has been identified at several generating stations due to fuel oil leakage from underground facilities and seepage from the ash and pyrites disposal areas and the coal piles. Remedial actions are under way at Brunner Island and may be required at the other plants. Many of the actions required by the residual solid waste regulation will also address these ground water issues.

Another related activity is studies required by Pennsylvania DER to control trace metal emissions in the power plant wastewater streams. Toxics Reduction Evaluation (TRE) studies are in progress for Montour and Sunbury and are expected to begin at the other plants in the next few years. These studies are expected to result in plant modifications to recycle and reduce wastewater streams and installation of chemical treatment facilities to treat the water discharges. These actions are being integrated with the residual solid waste disposal modifications and the ground water protection activities.

Waste disposal and water quality projects shown in the capital budget total $68 million for the 1995-1999 period. A significant portion of these projects address the issues discussed above. Additional capital expenditures that may occur to address these issues total $ 46 million for the 1995-1999 period and $31 million for the 2000-2004 period.

2. CLEAN AIR ACT - EXPOSURES

a) AIR TOXICS - TITLE III, PM 10

In addition to acid rain provisions, the 1990 Federal Clean Air Act Amendments require EPA to conduct a study of hazardous air emissions from power plants.

EPA is also studying the health effects of fine particulates (PM 10) which are emitted from power plants and other sources. Adverse findings from either study could cause EPA to mandate (in the 1998-2000 timeframe) additional ultra high efficiency particulate removal baghouses (with char injection for mercury removal) and/or flue gas scrubbing to remove vaporous trace metals and certain gaseous emissions (HCL) at most plants.

Potential capital expenditures are $410 million in the 2000-2004 time frame. If sulfur dioxide scrubbers are installed at Montour to meet Title IV, Phase II, requirements, they will likely also be effective in removing air toxics and fine particulate. Therefore, this potential capital expenditure may be reduced by $130 million.

b) ADDITIONAL NO_x REDUCTIONS FOR AMBIENT OZONE ATTAINMENT - TITLE I

Title I of the Clean Air Act addresses areas that currently do not meet federal ambient air quality standards. Much of the east coast from Virginia to New England exceeds the ground-level ozone standard. Ozone is formed through a series of photochemical reactions that occur on hot summer days when volatile organic compounds (VOCs) and NO_x mix together in the presence of sunlight. VOCs are emitted by motor vehicles, paints, solvents and industry. NO_x is emitted from motor vehicles, industry and utilities.

Title I initially requires that Reasonably Available Control Technology (RACT) for NO_x and VOCs be installed on all stationary sources within the Northeast Ozone Transport Region by (OTC) May 1995. The transport region includes all of Pennsylvania in addition to all states in the Northeast from DC to Maine and is administered by an Ozone Transport Commission (OTC) which includes

representation from each of the twelve states in the Region plus the District of Columbia.

Title IV, the acid rain title of the Clean Air Act already requires low-NO_x burners on seven Phase I units by 1995 and seven Phase II units by 2000. PP&L expects DER to approve as RACT low-NO_x burners similar to the acid rain requirements. Therefore, in addition to $69 million for NO_x burners on the seven Phase I units, the budget now shows $53 million for NO_x burners on five of the seven Phase II units to be placed in service by May 1995. Burner modifications to meet RACT are not planned for Martins Creek 3 & 4 and the small anthracite boilers at Sunbury and Holtwood.

The Clean Air Act requires each state within the Ozone Transport Region to submit to EPA by November 15, 1994, an implementation plan to achieve ozone attainment by 1999 to 2005 (depending on the severity of a geographic location's ozone exceedences). The Clean Air Act requires the attainment demonstration to be based on photochemical transport modeling studies of NOx and VOC emissions. Initial modeling studies implied that significant post-RACT NO_x reductions would be required from large stationary sources such as utility boilers. Information from improved modeling efforts that have been ongoing will not be available until late 1995 or later. This is well after the individual states must submit their plans to EPA. However, EPA has not offered the states relief from the November 15, 1994 plan submittal deadline.

In late August the Stationary Source Committee of the OTC approved a draft Post-RACT NO_x emission reduction strategy which was approved by the full OTC in late September. The individual states will use this as guidance in submitting their November 15 plans to EPA. The strategy proposes two-

phases of reductions of stationary NO_x sources from pre-Clean Air Act levels. For PP&L, a 55% reduction by May 1999 and a 75% reduction by 2003 are expected to be required. The 2003 reductions take effect unless modeling completed by 1997 indicates a different reduction. The reductions would be required from May 1 to September 30 during a 5 month ozone season.

At this time it is uncertain how the percent reductions will be calculated or how the emission reductions will be allocated among sources in Pennsylvania. The RACT NO_x burners that PP&L will have in service by May 1995 will produce about a 40% reduction. The additional reductions will require selective non-catalytic reduction (SNCR) or selective catalytic reduction (SCR) on many of PP&L's units by 1999 and most of PP&L's units by 2003.

The 1999 reductions will require capital expenditures of $40-100 million in the 1998-1999 time frame. The 2003 reductions, if required by the final modeling, will require expenditures of up to an additional $200 million in the 2000-2005 time frame.

3. BRUNNER ISLAND/MARTINS CREEK/SUNBURY COOLING TOWERS

Congress has been considering a reauthorization of the Clean Water Act which includes a possible deletion of the 316(a) variance that allows PP&L to discharge warm circulating river water into the Susquehanna and Delaware Rivers. It is expected that this variance will be allowed to continue; however, should this variance be deleted, the most severe solution would be the installation of cooling towers. The towers would be placed in service in the 1999-2004 time frame at a cost of $54 million.

4. GREEN MOUNTAIN MANUFACTURING SITE

PP&L and various governmental and economic development agencies are currently in the process of gaining financing and approvals for the development of the Green Mountain manufacturing site near Hazleton. This site will be developed with the intent of securing a large manufacturing facility. If this industrial plant includes new large electric arc furnaces, 230 kV supply from Harwood would be required. Electric supply under this scenario is estimated to cost approximately $9 million in the 1995-97 time period.

5. SPARE GENERATOR STEP-UP TRANSFORMERS

As a result of the recent Montour transformer failure and subsequent difficulties with spare GSU units, a study is now underway to determine system spare transformer requirements. Results of that study may well be a recommendation to purchase one spare transformer at an estimated cost of $3.0 million.

6. CABLE LIMITER RETROFIT PROGRAM

The cable limiter retrofit program was initiated some time ago to provide improved protection for underground secondary cables. Sixty locations have not been completed due to customer refusal to grant an outage or due to space restrictions. Resolution of these final sixty installations could range from the customer's signing of a waiver to replacement of cables or other equipment. Preliminary estimates for the replacement option total $750,000. A program is currently being developed to resolve the remaining retrofits.

7. POWER CONDITIONING PROGRAM

A business plan was completed during 1994 for a proposed program through which PP&L would offer, to its customers, products to address problems and concerns including surge protection and voltage fluctuations. The results of the

business plan included a finding that such a program would be more appropriately included within an unregulated subsidiary. A case involving, in part, the regulated/unregulated character of a similar program proposed by another Pennsylvania utility is currently pending before the PUC. Based on the conclusion of the business plan, an item is included in the chapter of potential capital expenditures to indicate the possibility that funding from within the regulated environment may be required. The business plan envisions a five-year program at which point most potential customers will have been accessed. About $15,000/year thereafter is estimated to access new customers.

APPENDIX A

1995 LIST OF PROJECTS

1995 CAPITAL CONSTRUCTION BUDGET
EXISTING GENERATION - NUCLEAR
LIST OF PROJECTS

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
311	SUSQUEHANNA SES - UNITS 1,2&CMN PIMS EQUIPMENT	151	68	776	995
369	SUSQUEHANNA SES - UNIT 1 CONTAINMENT RADIATION MONITORS	5282	540		5822
370	SUSQUEHANNA SES - UNIT 2 CONTAINMENT RADIATION MONITORS	4194	636	56	4886
379	SUSQUEHANNA SES - UNIT 1 POWER UPRATE PROJECT	10213	3187		13400
402	SUSQUEHANNA SES - UNIT 1 MECHANICAL STRESS IMPROVEMENT PROJECT PROCESS	845	855		1700
403	SUSQUEHANNA SES - UNIT 2 MECHANICAL STRESS IMPROVEMENT PROJECT PROCESS	700	854		1554
406	SUSQUEHANNA SES - UNITS 1&2 CONDENSER DEMIN VESSEL RESIN TRANSFER	3070	2329		5399
417	SUSQUEHANNA SES - UNIT 1 EXTRACTION STEAM PIPING REPLACEMENT	3131	1293	2067	6491
418	SUSQUEHANNA SES - UNIT 2 EXTRACTION STEAM PIPING REPLACEMENT	3131	1654	1697	6482
435	SUSQUEHANNA SES - UNIT 1 DEGRADED GRID MODIFICATIONS		35		35

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
439	SUSQUEHANNA SES - CMN SPENT FUEL STORAGE ADDITIONS	1173	552	9565	11290
440	SUSQUEHANNA SES - UNIT 1 REPLACE PLANT COMPUTER SYSTEM	2948	1935	5396	10279
441	SUSQUEHANNA SES - UNIT 2 REPLACE PLANT COMPUTER SYSTEM	2949	4590	2290	9829
442	SUSQUEHANNA SES - UNIT 1 REACTOR CORE STABILITY	589	180	891	1660
443	SUSQUEHANNA SES - UNIT 2 REACTOR CORE STABILITY	588	175	899	1662
451	SUSQUEHANNA SES - UNIT 1 CONTROL ROD REPLACEMENT DURING REFUELING - INSPECTION OUTAGE #8	648	225		873
452	SUSQUEHANNA SES - UNIT 2 CONTROL ROD REPLACEMENT DURING REFUELING - INSPECTION OUTAGE #7		678		678
463	SUSQUEHANNA SES - UNIT 1 CONDENSER TUBE CLEANING PROJECT	136	1125		1261
464	SUSQUEHANNA SES - UNIT 2 CONDENSER TUBE CLEANING PROJECT	404	765	278	1447
465	SUSQUEHANNA SES - UNIT 1 DIGITAL FEEDWATER CONTROL	158	1136		1294
466	SUSQUEHANNA SES - UNIT 2 DIGITAL FEEDWATER CONTROL	158	1135		1293

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
479	SUSQUEHANNA SES - UNIT 1 IPE UPGRADES	108	167		275
480	SUSQUEHANNA SES - UNIT 2 IPE UPGRADES	108	167		275
482	SUSQUEHANNA SES - UNIT 1 POWER UPRATE MODIFICATIONS	1044	1807		2851
483	SUSQUEHANNA SES - UNIT 1 REACTOR RECIRC PUMP SHAFT REPLACEMENT	1305	450	5623	7378
484	SUSQUEHANNA SES - UNIT 2 REACTOR RECIRC PUMP SHAFT REPLACEMENT	1305	2340	3706	7351
487	SUSQUEHANNA SES - UNIT 1 REFUELING BRIDGE UPGRADE	357	1229	232	1818
497	SUSQUEHANNA SES - UNIT 1 VENT STACK MONITORING (PHASE 2)	77	707		784
499	SUSQUEHANNA SES - UNIT 1 VIBRATION MONITORING MAJOR ROTATING EQUIPMENT #8 RIO	84	106		190
500	SUSQUEHANNA SES - UNIT 2 VIBRATION MONITORING MAJOR ROTATING EQUIPMENT #7RIO	84	106		190
501	SUSQUEHANNA SES - CMN PURCHASE A DRYER/ SEPARATOR SYSTEM	1032	127		1159

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
502	SUSQUEHANNA SES - CMN INSTALL A COMPUTER LOCAL AREA NETWORK (LAN) IN THE SOUTH BLDG. AND S&A BUILDING	720	810		1530
508	SUSQUEHANNA SES - UNIT 2 CIRCULATING WATER EXPANSION JOINT REPLACEMENT	37	180	451	668
513	SUSQUEHANNA SES - UNIT 1 (RPV) WATER LEVEL INSTRUMENTATION VENTING MODIFICATIONS	1594	420	232	2246
515	SUSQUEHANNA SES - UNIT 2 REFUELING PLATFORM UPGRADE (LONG TERM PROJECT)	357	1229	232	1818
519	SUSQUEHANNA SES - UNIT 1 INSTALL MAIN TURBINE VIBRATION SYSTEM	205	120		325
520	SUSQUEHANNA SES - UNIT 2 INSTALL MAIN TURBINE VIBRATION SYSTEM	205	120		325
522	SUSQUEHANNA SES - CMN PLANT COMPUTER UPGRADE	45	360	233	638
524	SUSQUEHANNA SES - UNIT 1 INSTALL CONTAINMENT OXYGEN MONITORING		23	443	466
525	SUSQUEHANNA SES - UNIT 2 INSTALL CONTAINMENT OXYGEN MONITORING		23	443	466

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
526	SUSQUEHANNA SES - CMN FIRE PROTECTION UPGRADES	20	197	301	518
527	SUSQUEHANNA SES-UNIT 1 FIRE PROTECTION UPGRADES	18	180	734	932
528	SUSQUEHANNA SES-UNIT 2 FIRE PROTECTION UPGRADES	18	180	734	932
529	SUSQUEHANNA SES - UNIT 1 MAIN STEAM ISOLATION VALVE LEAKAGE CONTROL ELIMINATION	403	696		1099
530	SUSQUEHANNA SES - UNIT 2 MAIN STEAM ISOLATION VALVE LEAKAGE CONTROL ELIMINATION	198	900		1098
531	SUSQUEHANNA SES - CMN INSTALL PHYSICAL PROTECTION BARRIERS	376	539		915
532	SUSQUEHANNA SES - UNIT 1 REPLACE RESIDUAL HEAT REMOVAL MOTOR LUBE OIL COOLER	360	78		438
533	SUSQUEHANNA SES - UNIT 2 REPLACE RESIDUAL HEAT REMOVAL MOTOR LUBE OIL COOLER	360	81		441
534	SUSQUEHANNA SES - UNIT 1 REPLACE HIGH PRESSURE FIRST STAGE BUCKETS		921		921
535	SUSQUEHANNA SES - UNIT 1 VALVE COMPLIANCE MODS	26	374		400

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
536	SUSQUEHANNA SES - UNIT 2 EXPANSION JOINT REPLACEMENT	37	90	543	670
537	SUSQUEHANNA SES - UNIT 2 REACTOR WATER LEVEL INSTRUMENTATION	1595	405		2000
538	SUSQUEHANNA SES-CMN SECURITY COMPUTER UPGRADE	173	101	6137	6411
539	SUSQUEHANNA SES - UNIT 1 TURBINE GENERATOR RETAINING RINGS	580	390		970
880	SUSQUEHANNA SES - COMMON CAPITAL SPARE PARTS - 1995		1511		1511
885	SUSQUEHANNA SES - COMMON CAPITAL OFFICE FURNITURE AND EQUIPMENT-TOOLS AND EQUIPMENT		1603		1603
900	SUSQUEHANNA SES MINOR WORK PROJECTS - CAPITAL		900		900
910	SUSQUEHANNA SES SITE SERVICES - CAPITAL		857		857
920	SUSQUEHANNA SES MAINTENANCE-CAPITAL REPLACEMENTS		277		277
980	SUSQUEHANNA SES UNAPPROVED OR POTENTIAL PROJECTS		128		128
990	SUSQUEHANNA SES UNIDENTIFIED PROJECTS		4654		4654
TOTAL EXISTING GENERATION-NUCLEAR		53299	49500	43959	146758

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
1121	MARTINS CREEK SES - UNIT 1&2 ASH BASIN #1 CLOSURE	150	20	1424	1594
1138	MARTINS CREEK SES - 4 REPLACE TURBINE CONTROL SYSTEMS AND GOVERNING CONTROL SYSTEM	1615	542		2157
1140	MARTINS CREEK SES - UNIT 1&2 INSTALL BOTTOM ASH HANDLING SYSTEM	200	500	1791	2491
1143	MARTINS CREEK SES - UNIT 3 CONVERT TO GAS-OIL CO-FIRING	464	462	14860	15786
1144	MARTINS CREEK SES - UNIT 4 CONVERT TO GAS-OIL CO-FIRING		248	11999	12247
1148	MARTINS CREEK SES - UNITS 1&2 INSTALL GROUNDING SYSTEM	100	200	222	522
1152	MARTINS CREEK SES - UNIT 4 REPLACE VOLTAGE REGULATOR	208	190		398
1164	MARTINS CREEK SES CLOSE LOW VOLUME WASTE BASIN	12	1387		1399
1165	MARTINS CREEK SES INSTALL WASTE SLUICE CHANNELS	30	1197		1227
2025	SUNBURY SES - UNIT 1 TURBINE REHABILITATION	8500	3925		12425
2034	SUNBURY SES - UNIT 4 REPLACE ECONOMIZER		66	1885	1951

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
2062	SUNBURY SES - UNIT 1 REPLACE ECONOMIZER 1A & 1B	256	2116		2372
2066	SUNBURY SES - UNIT 1 REPLACE 1A EXTENDED SURFACE BRICK	105	471		576
2067	SUNBURY SES - UNIT 1 REPLACE 1B EXTENDED SURFACE BRICK	430	471		901
2090	SUNBURY SES - UNIT 4 INSTALL LOW NOX BURNERS	2879	2428		5307
2097	SUNBURY SES - UNIT 4 REPLACE OUTLET CONVECTION SUPERHEAT TUBES		15	430	445
2106	SUNBURY SES REPLACE TURBINE AUXILIARY BAY ROOF	5	200		205
2127	SUNBURY SES - UNIT 4 PRECIPITATOR MODIFICATIONS	650	1077		1727
2128	SUNBURY SES - UNIT 1 REPLACE GENERATOR ROTOR	2941	200		3141
2141	SUNBURY SES - CLOSE ASH BASIN NO. 1	48	355	984	1387
2142	SUNBURY SES - CLOSE ASH BASIN NO. 2	48	460	1261	1769
2148	SUNBURY SES - UNIT 1 REPLACE 1A AND 1B AIRPORT WALL INSULATION	100	2300		2400

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
2149	SUNBURY SES - UNIT 1 REPLACE 1A AND 1B BASKETED HEATING ELEMENTS	26	463		489
2158	SUNBURY SES - UNIT 3 REPLACE TURBINE GOVERNOR	44	388		432
2164	SUNBURY SES - UNIT 4 REPLACE GENERATOR ROTOR	73	221	3013	3307
2169	SUNBURY SES REPLACE FILTERED WATER PIPING	50	200	249	499
2171	SUNBURY SES - UNIT 4 REPLACE FEEDWATER REGULATING VALVE	30	236		266
2174	SUNBURY SES ADD DRY FLY ASH HANDLING	604	1164	16304	18072
2175	SUNBURY SES ADD BOTTOM ASH HANDLING	189	230	3538	3957
2176	SUNBURY SES ADD WASTE WATER TREATMENT	200	500	7265	7965
2673	SUNBURY SES - UNIT 1 REPLACE 4KV & 480V SWITCHGEAR	1995	584		2579
3036	HOLTWOOD SES CLOSE ASH BASIN NO. 2-PHASE 1	47	34	1343	1424
3037	HOLTWOOD SES ADD DRY FLY ASH HANDLING	160	100	1062	1322

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
3040	HOLTWOOD SES ADD AIR CANNONS		86		86
4115	BRUNNER ISLAND SES CONSTRUCT NEW PYRITES FACILITY	13	30	701	744
4116	BRUNNER ISLAND SES COAL PILE LINER	420	150	2837	3407
4143	BRUNNER ISLAND SES - UNIT 2 REPLACE HORIZONTAL REHEATER AND SUPERHEATER AND ECONOMIZER	1200	14800		16000
4164	BRUNNER ISLAND SES DRY FLYASH CONVERSION	17061	9000		26061
4187	BRUNNER ISLAND SES - UNIT 1 REPLACE IP/LP ROTOR	3827	150		3977
4188	BRUNNER ISLAND SES DRY FLY ASH CREW AND SERVICE BUILDING	150	150		300
4205	BRUNNER ISLAND SES CLOSE ASH BASIN NO. 6	356	5	1124	1485
4206	BRUNNER ISLAND SES CLOSE ASH BASIN NO. 7	460	5	1120	1585
4220	BRUNNER ISLAND SES - UNIT 2 REPLACE HOT REHEAT PIPE - PHASE 2	34	746		780
4225	BRUNNER ISLAND SES - UNIT 1 ADD EXTRACTION STEAM NON-RETURN VALVE AIR OPERATORS	6	75		81

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
4231	BRUNNER ISLAND SES ADD LAND IMPROVEMENTS TO WETLANDS	58	26	199	283
4234	BRUNNER ISLAND SES CLOSE SOUTH PORTION OF ASH BASIN 4	9	77	497	583
4235	BRUNNER ISLAND SES WASTE WATER TREATMENT FACILITIES	34	111	1040	1185
4238	BRUNNER ISLAND SES INSTALL PRECIPITATOR DRAINAGE AND PAVING		170		170
4550	BRUNNER ISLAND SES - UNIT 2 REBLADE HP TURBINE ROTOR	573	425		998
5019	MONTOUR SES - UNIT 1 REPLACE COMPUTER	566	1284		1850
5044	MONTOUR SES OFFICE & SERVICES BLDG EXPANSION	33	50	256	339
5084	MONTOUR SES - UNIT 1 REPLACE CONTROL SYSTEM	1143	5803		6946
5085	MONTOUR SES - UNIT 2 REPLACE CONTROL SYSTEM	417	619	4886	5922
5103	MONTOUR SES - UNIT 1 INSTALL LOW NOX BURNERS	7500	9600		17100
5104	MONTOUR SES - UNIT 1 INSTALL FLUE GAS DESULFURIZATION	1000	1000	325883	327883

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
5119	MONTOUR SES - UNIT 1 REPLACE GENERATOR RETAINING RINGS	47	434		481
5149	MONTOUR SES - UNIT 1 REWIND GENERATOR ROTOR	96	1100		1196
5150	MONTOUR SES - UNIT 2 REPLACE IP TURBINE INNER CYLINDER	1106	897	460	2463
5154	MONTOUR SES CLOSE ASH BASIN NO. 1 - SECTION A	320	780	5814	6914
5156	MONTOUR SES NEW BOTTOM ASH FACILITIES	100	400	2483	2983
5157	MONTOUR SES NEW PYRITES FACILITIES	74	356	469	899
5163	MONTOUR SES - UNIT 1 REPLACE TURBINE SUPERVISORY CONTROLS AND VIBRATION MONITORING SYSTEM	25	208		233
5167	MONTOUR SES - UNIT 1 REPLACE FEEDWATER HEATER 2A/B AND 3A/B	279	3075		3354
5171	MONTOUR SES - UNIT 1 REPLACE SULFUR BURNING GAS CONDITIONING SYSTEM CONTROLS	58	314		372
5172	MONTOUR SES - UNIT 2 REPLACE SULFUR BURNING GAS CONDITIONING SYSTEM CONTROLS	40	35	255	330

1995 CAPITAL CONSTRUCTION BUDGET
EXISTING GENERATION - FOSSIL/HYDRO
LIST OF PROJECTS

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
5175	MONTOUR SES INSTALL FLY ASH SCREENING FACILITY	350	300		650
5179	MONTOUR SES - UNITS 1&2 INSTALL COAL YARD SEWAGE PUMP STATION	74	176		250
6005	HOLTWOOD HES REPLACE 13.2KV OCBS IN HYDRO BUS ROOM	15525	559		16084
6034	HOLTWOOD HES INSTALL FISH PASSAGE FACILITIES	1700	6800	12340	20840
6040	HOLTWOOD HES REPLACE OPERATING CYLINDERS	30	400	779	1209
6041	HOLTWOOD HES REMOVE ELECTRICAL EQUIPMENT		200	398	598
7510	KEYSTONE SES - PP&L SHARE VARIOUS ADDNS & REPLACEMENTS		4099		4099
7511	KEYSTONE SES - UNITS 1&2 INSTALL LOW NOX BURNERS	3794	3241		7035
7750	CONEMAUGH SES - PP&L SHARE VARIOUS ADDNS & REPLACEMENTS		2336		2336
7753	CONEMAUGH SES - UNIT 2 INSTALL FLUE GAS DESULFURIZATION	6823	2564		9387
7910	ASBESTOS PROGRAM - VARIOUS LOCATIONS		1428		1428

1995 CAPITAL CONSTRUCTION BUDGET
EXISTING GENERATION - FOSSIL/HYDRO
LIST OF PROJECTS

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
7920	REMOVE RETIRED IN-PLACE EQUIPMENT - ALL FOSSIL/HYDRO PLANTS		100		100
7960	GENERATING STATIONS UNANTICIPATED REPLACEMENTS		1000		1000
7980	GENERATING STATIONS MINOR REPLACEMENTS		1500		1500
7990	GENERATING STATIONS MINOR ADDITIONS		700		700
8000	GENERATION PROJECTS UNCOMMITTED		4818		4818
	TOTAL EXISTING GEN-FOSSIL AND HYDRO	87460	105132	429171	621763

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
8008	LACKAWANNA 230-69KV SUB-INSTALL CONTINUOUS MONITORING RECORDER AND UPGRADE RELAYING	216	854		1070
8025	SUSQUEHANNA 230KV SWITCHYARD-RETERMINATE JENKINS 230 KV LINE	200	300		500
8031	SUNBURY 500-230KV SUBSTATION-INSTALL ALARM MANAGEMENT SYSTEM		19	175	194
8034	SUSQUEHANNA 230KV SWITCHYARD-REPLACE CONTROL CUBICLE	5641	1059		6700
8036	SUSQUEHANNA T-10 230KV SWITCHYARD	4600	3580		8180
8037	ALBURTIS 500KV SUBSTATION-MODIFY CARRIER EQUIPMENT AND INSTALL ALARM MANAGEMENT SYSTEM	328	300		628
8042	NORTHERN PL 500KV TRANSMISSION-REPLACE PRIMARY #1 PILOT RELAY SCHEME (PHASE I AND II)	200	500	7853	8553
8043	BRUNNER ISLAND SES-REPLACE 230KV SWITCHYARD DISCONNECTS	367	295	178	840
8048	SIEGFRIED 230/69KV SUBSTATION-INSTALL DOUBLE BREAKER BAY ARRANGEMENT	34	366		400
8049	SUSQUEHANNA 230KV-REPLACE 2 BAY 3 CB'S AND 5 ATB CB'S		47	1141	1188

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
8052	JUNIATA SUBSTATION-INSTALL 2ND DUAL COMPRESSOR PACKAGE AND UPGRADE CAPACITOR BANK RELAYS		190		190
8081	MARTINS CREEK 230KV SWITCHYARD-REPLACE CBS IN BAY 1		54	496	550
8680	BUSHKILL SWITCHING STATION-BLOOMING GROVE 230-69 SUB-REPL TONE RELAY EQUIP., INSTALL PT'S & UPGRADE MISC. STATION EQUIPMENT	32	49	676	757
8700	MARTINS CREEK, NORTHWOOD & QUARRY SUBS-UPGRADE TONE RELAY SCHEMES	20	84	892	996
9005	HOSENSACK/BUXMONT 230KV LINE-RECONDUCTOR FOR HIGHER CAPACITY	196	1717		1913
9960	REPLACE OR MODIFY THE DC STATION BATTERY AT VARIOUS BULK POWER STATIONS		96		96
9970	BULK POWER IMPROVEMENTS		300		300
	TOTAL BULK POWER TRANSMISSION	11834	9810	11411	33055

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
	REGIONAL SUPPLY				
10001	FRACKVILLE-EXCHANGE/EXCHANGE-CENTRALIA-UPGRADE TO KENRO AND LINE REMOVAL (4.5 MI.)	35	83	128	246
	<< OLD BI # 40073 >>				
10002	EXCHANGE 69KV SWITCHING STATION REMOVAL AND INSTALL NEW CONTROL CUBICLE AND SCADA	173	379	62	614
	<< OLD BI # 40074 >>				
10003	FRACKVILLE-FISHBACH #3 69KV LINE RECONSTRUCT 2.5 MILES TO 138KV D/C FROM OAK HILL SUB TO FISHBACH	311	41	1683	2035
	<< OLD BI # 40075 >>				
10008	ELDRED-PINE GROVE 69KV LINE-PHASE 1-RECONSTRUCT SECTION FROM ELDRED TO HEGINS TO 138 (5.7 MI)	50	56	3759	3865
	<< OLD BI # 40082 >>				
10017	ELDRED-CLEVELAND 69KV LINE - REPLACE OHGW FROM ELDRED TIE TO MOWRY/RELOCATE MT. CARMEL TAP	40	170		210
10018	SUNBURY-COLUMBIA 69KV LINE - REPLACE OHGW FOR 5.2 MI. FROM SUNBURY TO POINT TAP		8	79	87
10087	SUNBURY SES-REPLACE CONTROL CABLES AND UPGRADE 69KV, 132KV AND 230KV RELAY AND CONTROL FACILITIES AND REPLACE 230KV SCADA		30	4153	4183

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
10088	CLINTON-MUNCY 69KV LINE-REBUILD SECTION FOR 138KV DOUBLE CIRCUIT	351	1143		1494
10090	LYCOMING-LOCK HAVEN 1&2 69KV LN-RECONSTRUCT PART 1	532	2065	5068	7665
10091	LYCOMING-LOCK HAVEN 1&2 69KV LN-RECONSTRUCT PART 2	138	701	6735	7574
10094	LYCOMING 230-69KV SUBSTATION-REARRANGE 69KV YARD	235	213		448
	TOTAL REGIONAL SUPPLY	1865	4889	21667	28421
	AREA SUPPLY				
10308	FLEMINGTON 64-01 12KV LINE-RECONDUCTOR/RELOCATE THE SUGAR RUN TAP (PHASE 1)	10	141		151
	<< OLD BI # 10508 >>				
10309	FLEMINGTON 64-01 12KV LINE-RECONDUCTOR/RELOCATE THE SUGAR RUN TAP (PHASE 2)	13	149		162
	<< OLD BI # 10509 >>				
10503	WOOLRICH 69-12KV SUBSTATION-ADDITIONAL 12KV LINE AND TERMINAL		14	172	186
10504	WOOLRICH 56-01-INSTALL ADDITIONAL ENERGIZED THREE PHASE CABLE ON MCELHATTAN BRIDGE	10	83		93

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
11421	WILLIAMSPORT 69-12KV SUBSTATION-INSTALL BREAKER FAILURE PROTECTION ON 12KV CIRCUIT BRKRS AND REPL SCADA AT SUB & CTG << OLD BI # 12721 >>	36	28	643	707
11711	KENMAR 12-02 LINE-ADD 2 ADD'L PHASE WIRES TO THE MILL CREEK TAP	13	121		134
12010	MUNCY 47-03 12KV LINE-RECONDUCTOR/RELOCATE SECTIONS OF GLADE RUN TAP	18	162		180
12011	MUNCY 69-12KV SUBSTATION-ADDITIONAL 12KV LINE AND TERMINAL AND INCREASE TRANSFORMER CAPACITY	32	292		324
12114	HUGHESVILLE 70-02 12KV LINE-RECONDUCTOR, RELOCATE AND ADD PHASE TO BEAVER LAKE TAP		33	340	373
12115	HUGHESVILLE 70-02-ADD PHASE CLARKSTOWN TAP AND ADD PHASE/ RECONDUCTOR CHESTNUT GROVE TAP		21	232	253
13509	LIMESTONE 69-12KV SUBSTATION-REPLACE TRANSFORMER #2	10	93		103
13605	POINT 42-02 12KV LINE-RECONDUCTOR APPROX. 1.7 MILES OF THE WINFIELD TAP << OLD BI # 15605 >>		20	190	210

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
15814	BERWICK 69-12KV SUBSTATION-EXTEND 60-01 12KV LINE AND RECONDUCTOR 46-01 LINE	39	363		402
16914	SHAMOKIN 4KV-CONVERT THE UNIONTOWN FEEDER TO 12KV (PART II)		15	194	209
	<< OLD BI # 43314 >>				
16915	SHAMOKIN 4KV-CONVERT TO 12KV (PART I)	17	214		231
	<< OLD BI # 43315 >>				
19016	WADESVILLE 4KV SYSTEM-CONV TO 12KV		4	42	46
	<< OLD BI # 47916 >>				
	TOTAL AREA SUPPLY	198	1753	1813	3764
	TOTAL SUSQUEHANNA REGION	2063	6642	23480	32185

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
	REGIONAL SUPPLY				
20030	PECKVILLE-SCRANTON & LACKAWANNA-SCRANTON 138KV LNS	1296	216		1512
20042	HOFFMAN-MINOOKA 69KV LINE-RECONSTRUCT FOR DOUBLE CIRCUIT 138KV	2596	3312		5908
20043	LACKAWANNA-PECKVILLE #2 AND LACKAWANNA-SUBURBAN DOUBLE CIRCUIT 69KV LINE-RECONSTRUCT FOR DOUBLE CIRCUIT 138KV		73	681	754
20044	LACKAWANNA-PECKVILLE #1 69KV LINE-RECONSTRUCT FOR DOUBLE CIRCUIT 138KV		46	1935	1981
20046	JENKINS-MINOOKA #1&2-RECONSTRUCT FOR 138KV	132	172	972	1276
20047	MONTAGE 138KV TAP-1.5 MI.	275	98	399	772
20049	LACKAWANNA-CONSTRUCT 230-138KV SUBSTATION		200	9082	9282
20052	LACKAWANNA-SCRANTON #1 AND #2 69KV LINES-UPGRADE AT SCRANTON SUBSTATION		12	114	126
20054	HILL 138KV TAP	5	12	812	829
20056	LACKAWANNA 69KV CAPACITOR	21	192		213
	TOTAL REGIONAL SUPPLY	4325	4333	13995	22653

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
	AREA SUPPLY				
20715	EAST CARBONDALE 12-1 LINE-RECONDUCTOR WAYMART TAP	14	136		150
20718	EAST CARBONDALE 12-3-CREAMTON 4KV-CONVERT TO 12KV (PART 2)	19	183		202
20719	EAST CARBONDALE 12-3-CREAMTOWN 4KV-CONVERT TO 12KV (PART 3)		7	125	132
21504	EDELLA 69-12KV SUBSTATION-ADDITIONAL 12KV LINE AND TERMINAL AND ADD SCADA AND REBUILD GRIFFIN POND ROAD TAP	479	133		612
21506	CONSTRUCT A THREE PHASE TIE BETWEEN THE EDELLA 21-2 12KV LINE AND THE EYNON 16-1 12KV LINE		6	69	75
21714	MORGAN 69-12KV SUBSTATION-RECONDUCTOR 24-3 LINE (1.0 MI.)	9	95		104
22008	MT. JESSUP 23-4KV SUBSTATION-4KV TO 12KV CONVERSION (PART 2)	212	295		507
24120	SUBURBAN 23-4KV SUB-CONVERT JAUNTY & REMAINDER OF ECONOMY FEEDER TO 12KV	350	119		469
24301	HILL 69-12KV SUBSTATION AND 12KV LINE CONNECTIONS, INSTALL SCADA	5	16	985	1006

1995 CAPITAL CONSTRUCTION BUDGET
NORTHEAST DIVISION - SCRANTON AREA
LIST OF PROJECTS

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
24435	SCRANTON LTN-RECONSTRUCT MANHOLES 192 & 267	22	190		212
24436	SCRANTON LTN-REBUILD MANHOLE #191		10	97	107
24440	SCRANTON LTN-5TH CABLE BACKUP	80	77	3339	3496
24702	CEDAR AVENUE 69-12KV SUBSTATION-ADDITIONAL 12KV LINE AND TERMINAL AND LTN BACKUP		23	250	273
25101	MONTAGE 138-12KV SUBSTATION 12KV CONNECTING LINES AND SCADA	203	85	791	1079
	TOTAL AREA SUPPLY	1393	1375	5656	8424
	TOTAL SCRANTON REGION	5718	5708	19651	31077

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
	REGIONAL SUPPLY				
30054	KIMBLES 138KV TAP (0.5 MILE)	102	44	302	448
	TOTAL REGIONAL SUPPLY	102	44	302	448
	AREA SUPPLY				
30202	TINKER 69-12KV SUBSTATION-RECONDUCTOR 44-1 12KV LINE	18	273		291
30203	TINKER 69-12KV SUBSTATION-RECONDUCTOR AND REROUTE FENWICK TAP	21	191		212
31104	WEST DAMASCUS 69-12KV SUBSTATION 60-1 12KV LINE-RECONDUCTOR AND REBUILD A PORTION OF THE ABRAHAMSVILLE TAP		13	119	132
31219	KIMBLES 69-12KV SUBSTATION-(WALLENPAUPACK 39-4 LINE)-SANDY SHORE TAP ADDITIONAL PHASE		2	34	36
32507	MADISONVILLE 69-12KV SUBSTATION 55-1 LINE-ADDITIONAL PHASE	8	105		113
32807	HAMLIN 69-12KV SUBSTATION-87-2 LINE RIDGEVIEW DR. TAP-ADDITIONAL PHASE	3	48		51

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
33205	TAFTON 69-12KV SUBSTATION 80-1 LINE-CLOUD CREST TAP-INSTALL ADDITIONAL PHASE		4	54	58
33701	KIMBLES 69-12KV SUBSTATION AND 12KV CONNECTING LINES AND INSTALL SCADA	400	231	937	1568
33915	WALLENPAUPACK 69-12KV SUBSTATION REMOVE SUBSTATION AND CONNECTING LINES	9	78	344	431
34810	HEMLOCK 69-12KV SUBSTATION-67-1 LINE-ADDITIONAL PHASES	9	130		139
	TOTAL AREA SUPPLY	468	1075	1488	3031
	TOTAL NORTHEAST DIVISION - HONESDALE	570	1119	1790	3479

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
	REGIONAL SUPPLY				
40084	JENKINS-HARWOOD #1 69KV LINE-RECONSTRUCT JENKINS-WILKES-BARRE SECTION (11.2 MILES) FOR 138KV		69	4422	4491
40086	EAST PALMERTON-WAGNERS 69KV LINE RECONSTRUCT FOR DOUBLE CIRCUIT OPERATION FROM EAST PALMERTON TO CHRISTMANS-10.2 MILES (PART 1)	1413	992		2405
40087	EAST PALMERTON-WAGNERS 69KV LINE RECONSTRUCT FOR DOUBLE CIRCUIT OPERATION FROM CHRISTMANS TO LAKE HARMONY-9.1 MILES (PART 2) & CONV LAKE HARMONY TO "TWIN A"	790	2584	1996	5370
40096	*BUTLER 138KV TAP-(.6 MILES)*	215	76		291
	TOTAL REGIONAL SUPPLY	2418	3721	6418	12557
	AREA SUPPLY				
40520	WILKES BARRE LTN-RETOP 10 MANHOLES #7	24	259		283
40521	WILKES BARRE LTN-RETOP 10 MANHOLES #8	23	256		279
40522	WILKES BARRE LTN-RETOP 10 MANHOLES #9		13	126	139
40706	WILKES BARRE 69-12KV SUBSTATION-PENN HAZLE TAPS-CABLE REPLACE	6	149		155

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
41105	ARROWHEAD 69-12KV SUBSTATION-ADDITIONAL 12KV LINE AND TERMINAL << OLD BI # 46505 >>	11	136		147
41106	ARROWHEAD 69-12KV SUBSTATION-MAXATAWNY DRIVE TAP-RECONDUCTOR AND ADDITIONAL PHASES	9	187		196
41206	LAKE HARMONY 69-12KV SUBSTATION-RECONDUCTOR 54-2 AND TRANSFER PORTIONS OF 32-2 TO 54-2	13	290		303
41301	JACK FROST 69-12KV SUB & LINE CONNECTIONS << OLD BI # 46401 >>	91	901		992
42001	BUTLER 69-12KV SUBSTATION AND 12KV LINE CONNECTIONS	1169	526		1695
42205	HARTLAND 69-12KV SUBSTATION-84-3 LINE-RECONDUCTOR	12	107		119
42206	HARTLAND 69-12KV SUBSTATION-RECONDUCTOR 84-1 FOR TIE LINE WITH 48-2	2	53		55
42522	HARWOOD 69-12KV SUBSTATION-RECONDUCTOR HARWOOD 29-7 AND TIE TO 29-6	3	66		69
43101	CHRISTMANS 69-12KV SUBSTATION-BEAR CREEK LAKE TAP-RECONDUCTOR AND ADD ADDITIONAL PHASES	5	119		124

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
43412	WEISSPORT 69-12KV SUBSTATION-ADDITIONAL 12KV LINE AND TERMINAL	236	86	294	616
	<< OLD BI # 49812 >>				
	TOTAL AREA SUPPLY	1604	3148	420	5172
	TOTAL NORTHEAST DIVISION - HAZ / WB	4022	6869	6838	17729

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
	REGIONAL SUPPLY				
50017	WESCOSVILLE-TREXLERTOWN NOS 3&4 138/69KV LINES	2928	542		3470
50034	REBUILD SEIDERSVILLE-QUAKERTOWN 69KV	100	810	15568	16478
50044	HOSENSACK-UPPER HANOVER 69KV LINE-REBUILD SECTION FOR 138KV DOUBLE CIRCUIT BETWEEN HOSENSACK AND UPPER HANOVER	1200	468		1668
50045	WESCOSVILLE-SIEGFRIED #1&2 69KV LINES-CONVERT TO 138KV	3408	300	7892	11600
50050	RIDGE ROAD 138/69KV TAP LINE	1920	1667		3587
50052	SIEGFRIED-HAUTO #1 69KV LINE-RECONDUCTOR SIEGFRIED-TREICHLERS SECTION (1.93 MILES)	163	348		511
50058	HENRYVILLE 138KV TAP (3.7 MILES)	400	213	2608	3221
	<< OLD BI # 30053 >>				
50061	QUARRY-ELLIOTT HEIGHTS #1 AND #2 69KV LINES-INSTALL AIRBREAK SWITCHES		9	82	91
	TOTAL REGIONAL SUPPLY	10119	4357	26150	40626
	AREA SUPPLY				
50409	CANADENSIS 85-2 12KV LINE-INSTALL ASVC AT ALPINE SKI	25	210		235

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
50607	MECKESVILLE 69-1-ROBIN HOOD LAKES RECONDUCTORING AND ADDITIONAL PHASE	8	84		92
50717	WAGNERS 69-12KV SUBSTATION-NEW 12KV LINE AND TERMINAL AND CONVERT TO TWIN A < < OLD BI # 35717 > >		30	453	483
50814	LAKE NAOMI 86-1 LINE-HEMLOCK DRIVE TAP-ADDITIONAL PHASES < < OLD BI # 36014 > >		5	96	101
50815	LAKE NAOMI 86-3 LINE-HEMLOCK/ HILLCREST TAPS-ADDITIONAL PHASES < < OLD BI # 36015 > >		3	45	48
50917	MT. POCONO 64-1 LINE-INSTALL THREE PHASE ON ACE CORNERS TAP < < OLD BI # 36117 > >		8	134	142
51001	HENRYVILLE 69-12KV SUBSTATION AND 12KV LINE CONNECTIONS AND INSTALL SCADA < < OLD BI # 36301 > >		10	1809	1819
51214	TANNERSVILLE 57-1 12KV LINE-INSTALL ADDITIONAL PHASE ON NEOLA TAP < < OLD BI # 36614 > >		13	125	138
51304	BARTONSVILLE 79-1 12KV LINE-RECONDUCTOR_AND ADDITIONAL 12KV LINE AND TERMINAL < < OLD BI # 36804 > >		20	210	230

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
51307	BARTONSVILLE 79-1 LINE-CONSTRUCT 3 PHASE TIE TO NORTH STROUDSBURG 56-3	50	110		160
51723	GILBERT 69-12KV SUBSTATION 78-1 LINE-RECONDUCTOR 12KV LINE < < OLD BI # 38823 > >		11	101	112
51724	GILBERT 69-12KV SUBSTATION-CONVERT TO MODIFIED 'TWIN A'	58	345		403
52408	SOUTH SLATINGTON 69-12KV SUB-RECONDUCTOR A SECTION OF THE 44-3 LINE < < OLD BI # 50408 > >	13	160		173
52507	SCHNECKSVILLE 69-12KV SUB-CONVERT TO 138KV OPERATION < < OLD BI # 50707 > >	77	56	710	843
52508	SCHNECKSVILLE 138-12KV SUB-RECONDUCTOR 37-1 12KV LINE		4	45	49
52509	SCHNECKSVILLE 138-12KV SUB RECONDUCTOR 37-2 12KV LINE		3	63	66
52612	EGYPT 69-12KV SUBSTATION-CONVERT TO 138-12KV AND INSTALL SCADA < < OLD BI # 50912 > >	111	73	988	1172
52708	FOGELSVILLE 69-12KV SUBSTATION-FOGELSVILLE 22-2-RECONSTRUCT LYON VALLEY TAP FOR THREE PHASE OPERATION	29	378		407

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
52812	CRACKERSPORT 69-12KV SUBSTATION-RECONDUCTOR 1.1 MILE OF 05-2 LINE-GUTHSVILLE TAP		9	113	122
53310	EAST TEXAS 69-12KV SUBSTATION-EAST TEXAS 19-3 12KV LINE-RELOCATE/RECONSTRUCT LOMA 3 PHASE TAP << OLD BI # 52910 >>	8	129		137
54703	LANARK 69-12KV SUBSTATION-ADD'L 12KV LINE AND TERMINAL, CONVERT TO TYPE B OPERATION AND ADD SCADA << OLD BI # 56403 >>	55	589		644
55205	TREICHLERS 69-12KV SUBSTATION-BUILD TIE BETWEEN 48-1 & 48-2 LINE		16	199	215
56207	ELLIOTT HEIGHTS SUBSTATION-CONSTRUCT A NEW PAXTON TYPE, MODIFIED TYPE B 12KV YARD AND INSTALL SCADA, RECOND/REBLD 12-2 AND 12-5 12KV LINES	96	661	300	1057
56308	MINSI TRAIL 69-12KV SUBSTATION-RELOCATE THE 25-4 12KV LINE AND REMOVE 25-3/4/5 12KV LINE OFF THE TOWPATH << OLD BI # 55308 >>		16	213	229
56309	MINSI TRAIL 69-12KV SUBSTATION-RELOCATE THE 25-3 12KV LINE OFF THE TOWPATH << OLD BI # 55309 >>	27	343		370
56509	SEIDERSVILLE 69-12KV SUBSTATION-RECONDUCTOR SECTION OF THE 39-2 12KV LINE	9	71		80

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
56608	COOPERSBURG 69-12KV SUBSTATION-COOPERSBURG 09-3 12KV LINE-RELOCATE 3 PHASE LINE ONTO OLD BETHLEHEM PIKE	25	331		356
56609	COOPERSBURG 69-12KV SUBSTATION-09-3 12KV LINE-ADD A THIRD PHASE TO THE LOCUST VALLEY TAP	7	60		67
57204	EAST GREENVILLE 10-1 3PH RECONSTRUCTION		12	124	136
57307	UPPER HANOVER 69-12KV SUBSTATION RECONDUCTOR AND ADD PHASE TO 51-3 12KV LINE-0.4 MILES		5	108	113
57901	RIDGE ROAD 69-12KV SUBSTATION AND 12KV CONNECTING LINES AND SCADA << OLD BI # 58701 >>	681	363		1044
58207	FRANCONIA 69-12KV SUBSTATION-ADD THIRD PHASE TO MORWOOD TAP ON 18-4 12KV LINE		4	47	51
58314	HATFIELD 69-12KV SUBSTATION-RECONDUCTOR THE 20-2 12KV LINE	2	37		39
	TOTAL AREA SUPPLY	1281	4169	5883	11333
	TOTAL LEHIGH REGION	11400	8526	32033	51959

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
	REGIONAL SUPPLY				
60069	WEST SHORE-CARLISLE #1 & #2-RECONSTRUCT MECHANICSBURG TO CARLISLE SECTION	2414	2966	763	6143
60070	CARLISLE SUB - MODERNIZE 69KV RELAY AND CONTROL FACILITIES, REPLACE CABLES, REPLACE SCADA RTU AND UPGRADE CAPACITOR CONTROL	392	149		541
60074	WEST SHORE-HARRISBURG 1&2 LINES-RECONSTRUCT HARRISBURG-ROSEMONT SECTION	800	100	5000	5900
60081	WEST CARLISLE AND MT. ROCK 69KV TAP LINES-REHABILITATION		580	1403	1983
60086	JUNIATA-RICHFIELD 69KV-REBUILD NEWPORT TO THOMPSONTOWN SECTION		73	3446	3519
60088	HUMMELSTOWN 230-69KV SUBSTATION REPLACE TRANSFORMER 3		169	1567	1736
	TOTAL REGIONAL SUPPLY	3606	4037	12179	19822
	AREA SUPPLY				
60502	MIFFLINTOWN 69-12KV SUBSTATION 69KV AND 12KV LINE CONNECTIONS AND SCADA	85	619		704
61506	DALMATIA 69-12KV SUBSTATION-RELOCATE 36-2 12KV LINE		30	304	334

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
62008	HALIFAX 69-12KV SUB-ADD'L 12KV LN & TERM AND ADD SCADA	20	145		165
62009	HALIFAX 69-12KV SUBSTATION-RELOCATE 39-2 12KV LINE	280	43		323
62318	BENVENUE 69-12KV SUBSTATION-ADD THIRD PHASE TO LOSH RUN TAP	10	166		176
62319	BENVENUE 69-12KV SUBSTATION-DELLVILLE THREE PHASE	18	167		185
65810	ROSEMONT 69-12KV SUBSTATION-ADDITIONAL TRANSFORMER CAPACITY AND SCADA	2	15	142	159
66405	NORTH HARRISBURG 69-12KV SUBSTATION-ADDITIONAL 12KV LINE AND TERMINAL		21	189	210
66508	WINDSOR 69-12KV SUBSTATION-ADDITIONAL 12KV LINE AND TERMINAL	24	305		329
66715	WALNUT 12KV SYSTEM, SPLIT HARRISBURG LTN SYSTEM SOUTH SECTION ELECTRICAL WORK, PART 1	100	387		487
66716	WALNUT 12KV SYSTEM, SPLIT HARRISBURG LTN SYSTEM SOUTH SECTION ELECTRICAL WORK, PART 2	50	443		493
66717	WALNUT 12KV SYSTEM, SPLIT HARRISBURG LTN SYSTEM SOUTH SECTION ELECTRICAL WORK, PART 3		49	457	506

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
66718	WALNUT 12KV SYSTEM, SPLIT HARRISBURG LTN SYSTEM SOUTH SECTION ELECTRICAL WORK, PART 4		12	495	507
66719	WALNUT 69-12KV SUBSTATION-ELECTRICAL WORK, PART 2		9	170	179
66722	WALNUT SOUTH NETWORK, LTN SECONDARY WORK	5	222		227
66723	WALNUT SOUTH NETWORK, INSTALL A 750 KVA TRANSFORMER IN VAULT 567	5	115		120
66724	WALNUT SOUTH NETWORK, VAULT 498 REPLACE A 500 KVA TRANSFORMER WITH A 750 KVA TRANSFORMER	5	50		55
66725	WALNUT SOUTH NETWORK, INSTALL A 750 KVA TRANSFORMER VAULT IN THE AREA OF SECOND AND WALNUT STREETS	5	115		120
67114	HARRISBURG 69-12KV SUBSTATION-REPLACE OVERDUTIED BREAKERS AND REPLACE SCADA REMOTE		34	313	347
67706	LINGLESTOWN 69-12KV SUBSTATION-INCREASE TRANSFORMER CAPACITY MODIFIED TWIN A AND ADD SCADA		21	194	215
68505	DUKE 69-12KV SUBSTATION-ADDITIONAL 12KV LINE AND TERMINAL AND SCADA		18	404	422
68703	RUTHERFORD 69-12KV SUBSTATION-ADDITIONAL 12KV LINE AND TERMINAL AND SCADA		44	403	447

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
69705	SWATARA 69-12KV SUBSTATION-ADDITIONAL 12KV LINE AND TERMINAL	11	17	217	245
69818	HOCKERSVILLE 4KV-CONVERT TO 13KV-SINGLE FAMILY AND GARDEN APARTMENTS	57	577		634
	TOTAL AREA SUPPLY	677	3624	3288	7589
	TOTAL HARRISBURG REGION	4283	7661	15467	27411

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
	REGIONAL SUPPLY				
70015	WEST HEMPFIELD 230-138KV SUBSTATION	843	3076	6629	10548
70016	SOUTH AKRON 230-138KV SUBSTATION	2888	4443	4996	12327
70017	WEST HEMPFIELD-SOUTH MANHEIM #1& 2 69KV LINE-CONVERT TO 138KV OPERATION FROM WEST HEMPFIELD TO PRINCE (9.5 MI.)	422	57	1533	2012
70022	SOUTH AKRON 230-69KV SUBSTATION-UPGRADE MISCELLANEOUS RELAY AND CONTROL EQUIPMENT		13	279	292
70025	WEST HEMPFIELD-SOUTH MANHEIM 69KV TIE LINE (PENN CASTINGS TAP TO KELLOGG TAP) 1.6 MILES	31	199	1128	1358
70026	SOUTH AKRON-EARL 69KV LINE		230	10840	11070
70027	SOUTH AKRON-MORGANTOWN #2 69KV LINE-RECONDUCTOR KINZER 13 TIE TO MORGANTOWN SUBSTATION (10.0 MILES)	147	965	414	1526
70029	NEW MORGAN 69KV TAP LINE		174	1328	1502
70034	821/822 LINE-REBUILD BERKS SUB TO STATE HILL TP (1.5 MI.); STATE HILL TAP-ADD SECOND CIRCUIT (3.2 MI.)	597	1135		1732

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
70038	WEST HEMPFIELD-HUMMELSTOWN 69KV LINE-REBUILD NORTH COLUMBIA TAP TO DONEGAL SUBSTATION (3.2 MILES)	467	893	801	2161
70043	MCGOVERNVILLE 69KV TAP LINE		14	126	140
70045	ENGLESIDE-SOUTH AKRON 69KV LINE-CONVERT SECTION TO 138KV		233	2158	2391
70046	WEST HEMPFIELD-GRINNELL 69KV LINE-EXTEND TO NORTH COLUMBIA TAP (1.3 MILES)		20	185	205
70055	AT ELIZABETHTOWN 69-12KV SUB INSTALL A 10.8 MVAR 69KV CAPACITOR AND SCADA	15	463		478
	TOTAL REGIONAL SUPPLY	5410	11915	30417	47742
	AREA SUPPLY				
71206	STATE HILL 69-12KV SUBSTATION-CONVERT TO TWIN A AND SCADA	17	216		233
72205	MT. JOY 69-12KV SUBSTATION-ADDITIONAL 12KV LINE AND TERMINAL AND SCADA		22	194	216
72603	NORTH MANHEIM 69-12KV SUBSTATION ADDITIONAL 12KV LINE AND TERMINAL	198	135		333
73308	LINCOLN 69-12KV SUBSTATION-RECONDUCTOR 43-1 12KV LINE	14	81		95

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
73309	LINCOLN 69-12KV SUBSTATION-ADDITIONAL 12KV LINE AND TERMINAL, INCREASE TRANSFORMER CAPACITY, CONVERT TO TWIN A AND SCADA		10	989	999
73310	LINCOLN 69-12KV SUBSTATION-LINCOLN 43-2 12KV LINE EXTENSION	36	323		359
73511	COCALICO 69-12KV SUBSTATION-RECONDUCTOR 01-2 12KV LINE	16	148		164
73710	EAST PETERSBURG 69-12KV SUBSTATION-RECONDUCTOR 15-1 12KV LINE	5	95		100
74707	MORGANTOWN 69-12KV SUBSTATION-ADDITIONAL 12KV LINE & TERMINAL AND UPGRADE 69KV CAPACITOR PROTECTION		16	150	166
74801	NEW MORGAN SUBSTATION AND 12KV LINE CONNECTIONS		13	1084	1097
75005	LEOLA 69-12KV SUBSTATION-CONVERT TO 138KV-PART 1 & 2	38	281	375	694
75802	MARIETTA 69-12KV SUBSTATION-ADDITIONAL 12KV LINE AND TERMINAL	10	160		170
76112	HEMPFIELD 69-12KV SUBSTATION-REBUILD 38-3 12KV LINE		15	136	151
76309	DONERVILLE 69-12KV SUBSTATION-CONVERT TO TWIN A, 138KV OPERATION AND ADD 138KV SWITCHES PART 1 & 2	46	283	406	735

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
76606	ROHRERSTOWN 69-12KV SUBSTATION-CONVERT TO TWIN A, 138KV OPERATION AND ADD SCADA PART 1 & 2	41	227	395	663
76801	MCGOVERNVILLE 69-12KV SUBSTATION AND 12KV CONNECTING LINES AND SCADA	478	292	1480	2250
77113	PRINCE 69-12KV SUBSTATION-CONVERT TO 138KV	1123	1000	2060	4183
77212	LANCASTER LTN-REBUILD PRINCE-KING VAULT #147	8	10	178	196
77213	LANCASTER LTN-REBUILD KING-CHRISTIAN VAULT #146	80	262		342
77214	LANCASTER LTN-REBUILD MANHOLE #18	50	133		183
77217	LANCASTER LTN-CHRISTIAN-MIFFLIN VAULT #150	130	250		380
77218	LANCASTER LTN-REBUILD PRINCE-KING VAULT #193	5	10	151	166
77222	LANCASTER LTN ELIMINATE CONGESTION IN MANHOLE # 21	30	12		42
77409	EAST LANCASTER 69-12KV SUB-CONVERT TO 138KV-PART 1 & 2	38	240	418	696

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
77704	NORTH BRIDGEPORT 69-12KV SUB-CONVERT TO TWIN A, 138KV OPERATION AND ADD SCADA PART 1 & 2	41	229	399	669
78110	MILLERSVILLE 69-12KV SUBSTATION-ADDITIONAL 12KV LINE AND TERMINAL		23	216	239
78206	WEST WILLOW 69-12KV SUBSTATION-RECONDUCTOR 75-3 12KV LINE-PART 2	19	181		200
78207	WEST WILLOW 69-12KV SUBSTATION-RECONDUCTOR 75-3 12KV LINE-PART 3	12	228		240
78210	WEST WILLOW 69-12KV SUBSTATION-RECONDUCTOR 75-2 12KV LINE		3	48	51
78905	MOUNT NEBO 69-12KV SUBSTATION-RECONDUCTOR 48-1 12KV LINE		27	254	281
78906	MOUNT NEBO 69-12KV SUBSTATION-REBUILD 48-2 12KV LINE		11	166	177
79310	QUARRYVILLE 69-12KV SUBSTATION-56-3 12KV LINE REBUILD	93	90		183
79611	WAKEFIELD 69-12KV SUBSTATION-REBUILD 74-2 12KV LINE-(TAYLORIA NORTH TAP)	14	143		157
	TOTAL AREA SUPPLY	2542	5169	9099	16810
	TOTAL LANCASTER REGION	7952	17084	39516	64552

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
81101	REGIONAL SUPPLY-UPGRADE SUBSTATION CAPACITOR BANK PROTECTION SCHEMES		129		129
81102	REGIONAL SUPPLY IMPROVEMENTS		766		766
81103	RELOCATION DUE TO R/W REQUIREMENTS-TRANSMISSION		400		400
81104	POLE REPLACEMENTS-69KV AND ABOVE		800		800
81106	NUG CONNECTED TO THE REGIONAL SUPPLY SYSTEM-ENGINEERING FOLLOWUP AND TECHNICAL REVIEW		25		25
81109	REGIONAL 69KV AND 138KV LINES-IMPROVE GROUND CLEARANCE TO MAINTAIN LINE RATINGS		72		72
81111	REGIONAL SUPPLY SUBSTATIONS-DC STATION SERVICE IMPROVEMENTS		50		50
81113	SYSTEM - VARIOUS LOCATIONS MODIFY AND REPLACE AB SWITCHES TO OBTAIN PARALLEL BREAK CAPABILITIES		171		171
81115	PURCHASE POWER CIRCUIT BREAKERS-REGIONAL AND BULK POWER		130		130
81119	REPLACE DETERIORATED UPSWEPT ARMS-69KV AND ABOVE		450		450
81120	LOWER STRUCTURE GROUND RESISTANCE		300		300
	TOTAL REGIONAL POOL ITEMS		3293		3293

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
80001	RELOCATION DUE TO R/W REQUIREMENTS-DISTR		4000		4000
80002	ELIMINATE VULNERABLE FACILITIES LOCATED ALONG HIGHWAYS (INCLUDING MOD POLES)		150		150
80004	AREA SUPPLY IMPROVEMENTS		775		775
80007	PURCHASE OF 138-12KV TRANS		2710		2710
80009	CAPITAL REPAIRS TO FAILED 69-12KV POWER TRANSFORMERS		350		350
80013	PURCHASE POWER CIRCUIT BREAKERS-AREA SUPPLY		210		210
80015	CONNECTION OF NON-UTILITY GENERATION-AREA SUPPLY		25		25
80016	AREA SUPPLY SUBSTATIONS-DC STATION SERVICE IMPROVEMENTS		80		80
80017	REPLACEMENT OF DETERIORATED UNDERGROUND DISTRIBUTION CABLE		2400		2400
80018	LOW TENSION NETWORK PRIMARY CABLE REPLACEMENT		83		83
80019	REPLACEMENT OF DETERIORATED COPPERWELD CONDUCTOR		506		506
	TOTAL AREA POOL ITEMS		11289		11289

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
81001	POLE REPLACEMENTS-23KV & UNDER		3900		3900
81002	CAPACITORS-23KV & UNDER		750		750
81003	OIL CIRCUIT RECLOSERS		1400		1400
81004	DISTRIBUTION DEPARTMENT MINOR-LINES		4900		4900
81005	DISTRIBUTION DEPARTMENT MINOR-SUBSTATION		260		260
81006	DISTRIBUTION DEPARTMENT-STORMS AND EMERGENCIES		2700		2700
81008	DISTRIBUTION DEPARTMENT - INSTALL MOV'S AND ELBOW ARRESTORS AT SPECIFIC UG CABLE LOCATIONS		810		810
81009	DISTRIBUTION DEPARTMENT-REPLACE FAILED AND/OR DETERIORATED, NON-REPAIRABLE EQUIPMENT (INCL. LTN)		1020		1020
81011	DISTRIBUTION DEPARTMENT-FOREIGN UTILITY WORK		920		920
	TOTAL AREA BLANKET ITEMS		16660		16660

	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED			
	PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
REGIONAL SUPPLY				
SPECIFIC ITEMS	27845	33296	111128	172269
POOL ITEMS		3293		3293
TOTAL REGIONAL SUPPLY	27845	36589	111128	175562
AREA SUPPLY				
SPECIFIC ITEMS	8163	20313	27647	56123
POOL ITEMS		11289		11289
BLANKET ITEMS		16660		16660
TOTAL AREA SUPPLY	8163	48262	27647	84072
TOTAL REGIONAL & AREA SUPPLY	36008	84851	138775	259634

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
82001	138KV AND 69KV REVENUE EXTENSIONS		1200		1200
82002	12KV REVENUE EXTENSIONS ON SPECIFIC ERS		11300		11300
82003	REVENUE EXTENSIONS ON WORK ORDERS		46000		46000
83001	STREET LIGHTING-EXTENSION OR MODERNIZATION OF EXISTING SYSTEMS		3000		3000
83003	DISTR TRANSFORMERS		14000		14000
83004	METERS		4500		4500
	TOTAL REVENUE WORK		80000		80000

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
84001	GENERATION		100		100
84002	BULK POWER TRANSMISSION		300		300
84003	REGIONAL SUPPLY		200		200
84005	GENERAL PROPERTY		100		100
TOTAL SITES & LINE RIGHT-OF-WAY			700		700

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
85013	GENERAL OFFICE - NORTH BUILDING-NB1 UPGRADES	950	825		1775
85016	HARRISBURG SERVICE CENTER REPLACE HVAC SYSTEM		250	450	700
85017	GENERAL OFFICE - NORTH BUILDING-N3, N4, N5 RECONFIGURATION		1175		1175
85018	GENERAL OFFICE - NORTH BUILDING ESCALATOR REPLACEMENT		50	805	855
85019	GENERAL OFFICE - TOWER BUILDING REPLACE AIR HANDLING UNIT		200	350	550
85020	GENERAL OFFICE - TOWER BUILDING REPLACE ELEVATOR DRIVES		25	425	450
85090	HAZLETON OPERATING AREA SERVICE CENTER	100	2210	3090	5400
85093	HONESDALE OPERATING AREA - HAMLIN SERVICE CENTER	100	2995		3095
85099	SYSTEM FACILITIES SERVICE CENTER PHASE III	16220	770		16990
85801	LAND MANAGEMENT PROJECTS		245		245
87001	OFFICE AND SERVICE BUILDINGS ADDITIONS AND REPLACEMENTS		2815		2815
*	BUILDING PROJECTS-ADJUSTMENT		-1600		-1600
	TOTAL GENERAL BUILDINGS	17370	9960	5120	32450

* Adjustment for unanticipated future carryovers and/or project deferrals

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
86001	COMMUNICATION SYSTEM		85		85
86003	POWER MANAGEMENT SYSTEM		619		619
86005	CAPITALIZATION OF COMPUTER SOFTWARE	5300	39700	86000	131000
86006	LEASEHOLD IMPROVEMENTS		191		191
86007	REPLACEMENT OF SUPERVISORY REMOTES-SYSTEMWIDE		694		694
86008	POWER MANAGEMENT SYSTEM-MODIFICATIONS/IMPROVEMENTS		115		115
86009	PJM FACILITIES PROJECTS PP&L SHARE		469		469
86010	PJM-ENERGY MANAGEMENT COMPUTER SYSTEM-PL SHARE	400	1448	4950	6798
87002	OFFICE FURNITURE & EQUIPMENT		460		460
87003	TOOLS AND EQUIPMENT		550		550
87004	FIRE EXTINGUISHERS		27		27
87007	UNDERGROUND STORAGE TANKS-REPLACEMENT PROGRAM		200		200
89001	RETIREMENTS UNDISTRIBUTED COSTS AND ADJUSTMENTS		200		200
89002	PROJECTS REQUIRING SMALL AMOUNTS TO COMPLETE		2000		2000
89003	RESEARCH AND DEVELOPMENT		100		100
	TOTAL OTHER	5700	46858	90950	143,508

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
220	NUCLEAR FUEL PURCHASES		52100	274600	326700
	GRAND TOTAL	211671	438911	993986	1644568

APPENDIX B

1996 LIST OF PROJECTS

1996 CAPITAL CONSTRUCTION BUDGET 9/26/94
EXISTING GENERATION - NUCLEAR
LIST OF PROJECTS

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
311	SUSQUEHANNA SES - UNITS 1,2&CMN PIMS EQUIPMENT	219	185	591	995
370	SUSQUEHANNA SES - UNIT 2 CONTAINMENT RADIATION MONITORS	4830	56		4886
417	SUSQUEHANNA SES - UNIT 1 EXTRACTION STEAM PIPING REPLACEMENT	4424	1112	955	6491
418	SUSQUEHANNA SES - UNIT 2 EXTRACTION STEAM PIPING REPLACEMENT	4785	742	955	6482
439	SUSQUEHANNA SES - CMN SPENT FUEL STORAGE ADDITIONS	1725	6026	3539	11290
440	SUSQUEHANNA SES - UNIT 1 REPLACE PLANT COMPUTER SYSTEM	4883	4728	668	10279
441	SUSQUEHANNA SES - UNIT 2 REPLACE PLANT COMPUTER SYSTEM	7539	1622	668	9829
442	SUSQUEHANNA SES - UNIT 1 REACTOR CORE STABILITY	769	593	298	1660
443	SUSQUEHANNA SES - UNIT 2 REACTOR CORE STABILITY	763	593	306	1662
453	SUSQUEHANNA SES - UNIT 1 CONTROL ROD REPLACEMENT DURING REFUELING - INSPECTION OUTAGE #9		857		857

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
464	SUSQUEHANNA SES - UNIT 2 CONDENSER TUBE CLEANING PROJECT	1169	278		1447
483	SUSQUEHANNA SES - UNIT 1 REACTOR RECIRC PUMP SHAFT REPLACEMENT	1755	5122	501	7378
484	SUSQUEHANNA SES - UNIT 2 REACTOR RECIRC PUMP SHAFT REPLACEMENT	3645	2190	1516	7351
487	SUSQUEHANNA SES - UNIT 1 REFUELING BRIDGE UPGRADE	1586	232		1818
508	SUSQUEHANNA SES - UNIT 2 CIRCULATING WATER EXPANSION JOINT REPLACEMENT	217	93	358	668
513	SUSQUEHANNA SES - UNIT 1 (RPV) WATER LEVEL INSTRUMENTATION VENTING MODIFICATIONS	2014	232		2246
515	SUSQUEHANNA SES - UNIT 2 REFUELING PLATFORM UPGRADE (LONG TERM PROJECT)	1586	232		1818
522	SUSQUEHANNA SES - CMN PLANT COMPUTER UPGRADE	405	185	48	638
524	SUSQUEHANNA SES - UNIT 1 INSTALL CONTAINMENT OXYGEN MONITORING	23	324	119	466

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
525	SUSQUEHANNA SES - UNIT 2 INSTALL CONTAINMENT OXYGEN MONITORING	23	324	119	466
526	SUSQUEHANNA SES - CMN FIRE PROTECTION UPGRADES	217	185	116	518
527	SUSQUEHANNA SES - UNIT 1 FIRE PROTECTION UPGRADES	198	371	363	932
528	SUSQUEHANNA SES - UNIT 2 FIRE PROTECTION UPGRADES	198	371	363	932
536	SUSQUEHANNA SES - UNIT 2 EXPANSION JOINT REPLACEMENT	127	185	358	670
538	SUSQUEHANNA SES - CMN SECURITY COMPUTER UPGRADE	274	1910	4227	6411
540	SUSQUEHANNA SES - UNIT 2 CONTROL ROD REPLACEMENT DURING REFUELING - INSPECTION OUTAGE #8		284	239	523
543	SUSQUEHANNA SES - UNIT 1 VIBRATION MONITORING MAJOR ROTATING EQUIPMENT		185	339	524
544	SUSQUEHANNA SES - UNIT 2 VIBRATION MONITORING MAJOR ROTATING EQUIPMENT		185	339	524
880	SUSQUEHANNA SES - COMMON CAPITAL SPARE PARTS - 1996		1391		1391

1996 CAPITAL CONSTRUCTION BUDGET
EXISTING GENERATION - NUCLEAR
LIST OF PROJECTS

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
885	SUSQUEHANNA SES-COMMON CAPITAL OFFICE FURNITURE AND EQUIPMENT-TOOLS AND EQUIPMENT		1391		1391
900	SUSQUEHANNA SES MINOR WORK PROJECTS - CAPITAL		927		927
910	SUSQUEHANNA SES SITE SERVICES - CAPITAL		464		464
920	SUSQUEHANNA SES MAINTENANCE-CAPITAL REPLACEMENTS		925		925
990	SUSQUEHANNA SES UNIDENTIFIED PROJECTS		10500		10500
	TOTAL EXISTING GENERATION-NUCLEAR	43374	45000	16985	105359

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
1121	MARTINS CREEK SES - UNITS 1&2 ASH BASIN NO. 1 CLOSURE	170	20	1404	1594
1140	MARTINS CREEK SES - UNITS 1&2 INSTALL BOTTOM ASH HANDLING SYSTEM	700	1791		2491
1143	MARTINS CEEK SES - UNIT 3 CONVERT TO GAS-OIL CO-FIRING	926	14860		15786
1144	MARTINS CREEK SES - UNIT 4 CONVERT TO GAS-OIL CO-FIRING	248	511	11488	12247
1148	MARTINS CREEK SES - UNITS 1&2 INSTALL GROUNDING SYSTEM	300	222		522
2034	SUNBURY SES - UNIT 4 REPLACE ECONOMIZER	66	699	1186	1951
2097	SUNBURY SES - UNIT 4 REPLACE OUTLET CONVECTION SUPERHEAT TUBES	15	159	271	445
2141	SUNBURY SES - CLOSE ASH BASIN NO. 1	403	64	920	1387
2142	SUNBURY SES - CLOSE ASH BASIN NO. 2	508	73	1188	1769
2162	SUNBURY SES - UNIT 4 REPLACE 4B AIR HEATER GAS INLET EXPANSION JOINTS	8	10	25	43
2163	SUNBURY SES - UNIT 4 ECONOMIZER OUTLET DUCT EXPANSION JOINTS	14	26	70	110

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
2164	SUNBURY SES - UNIT 4 REPLACE GENERATOR ROTOR	294	2541	472	3307
2169	SUNBURY SES REPLACE FILTERED WATER PIPING	250	249		499
2174	SUNBURY SES ADD DRY FLY ASH HANDLING	1768	14900	1404	18072
2175	SUNBURY SES ADD BOTTOM ASH HANDLING	419	3294	244	3957
2176	SUNBURY SES ADD WASTE WATER TREATMENT	700	7265		7965
3035	HOLTWOOD SES - UNIT 17 LOW NOX BURNERS	175	11	2896	3082
3036	HOLTWOOD SES CLOSE ASH BASIN NO. 2 - PHASE 1	81	37	1306	1424
3037	HOLTWOOD SES ADD DRY FLY ASH HANDLING	260	950	112	1322
4034	BRUNNER ISLAND SES ELECTRICAL MAINTENANCE & O&S BUILDING EXPANSION	500	60	594	1154
4115	BRUNNER ISLAND SES CONSTRUCT NEW PYRITES FACILITY	43	199	502	744
4116	BRUNNER ISLAND SES COAL PILE LINER	570	2837		3407

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
4162	BRUNNER ISLAND SES - UNIT 3 REPLACE 1A & 1B FEEDWATER HEATER		283	2629	2912
4205	BRUNNER ISLAND SES CLOSE ASH BASIN NO. 6	361	39	1085	1485
4206	BRUNNER ISLAND SES CLOSE ASH BASIN NO. 7	465	35	1085	1585
4231	BRUNNER ISLAND SES ADD LAND IMPROVEMENTS TO WETLANDS	84	199		283
4234	BRUNNER ISLAND SES CLOSE SOUTH PORTION OF ASH BASIN 4	86	497		583
4235	BRUNNER ISLAND SES WASTE WATER TREATMENT FACILITIES	145	149	891	1185
5044	MONTOUR SES OFFICE & SERVICES BLDG EXPANSION	83	256		339
5085	MONTOUR SES - UNIT 2 REPLACE CONTROL SYSTEM	1036	4886		5922
5104	MONTOUR SES - UNIT 1 INSTALL FLUE GAS DESULFURIZATION	2000	11206	314677	327883
5107	MONTOUR SES - UNIT 2 INSTALL FLUE GAS DESULFURIZATION		3017	81732	84749
5150	MONTOUR SES - UNIT 2 REPLACE IP TURBINE INNER CYLINDER	2003	460		2463

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
5154	MONTOUR SES CLOSE ASH BASIN NO. 1- SECTION A	1100	199	5615	6914
5156	MONTOUR SES NEW BOTTOM ASH FACILITIES	500	1492	991	2983
5157	MONTOUR SES NEW PYRITES FACILITIES	430	469		899
5172	MONTOUR SES - UNIT 2 REPLACE SULFUR BURNING GAS CONDITIONING SYSTEM CONTROLS	75	255		330
6034	HOLTWOOD HES INSTALL FISH PASSAGE FACILITIES	8500	12340		20840
6040	HOLTWOOD HES REPLACE OPERATINGCYLINDERS	430	779		1209
6041	HOLTWOOD HES- REMOVE ELECTRICAL EQUIPMENT	200	398		598
7510	KEYSTONE SES - PP&L SHARE VARIOUS ADDNS & REPLACEMENTS		4222		4222
7750	CONEMAUGH SES - PP&L SHARE VARIOUS ADDNS & REPLACEMENTS		2407		2407
7910	ASBESTOS PROGRAM-VARIOUS LOCATIONS		2106		2106
7920	REMOVE RETIRED IN-PLACE EQUIPMENT - ALL FOSSIL/HYDRO PLANTS		103		103

1996 CAPITAL CONSTRUCTION BUDGET
EXISTING GENERATION - FOSSIL/HYDRO
LIST OF PROJECTS

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
7960	GENERATING STATIONS UNANTICIPATED REPLACEMENTS		1030		1030
7980	GENERATING STATIONS MINOR REPLACEMENTS		1545		1545
7990	GENERATING STATIONS MINOR ADDITIONS		721		721
8000	GENERATION PROJECTS UNCOMMITTED		16707		16707
	TOTAL EXISTING GEN-FOSSIL AND HYDRO	25916	116578	432787	575281

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
8027	MONTOUR 230KV SWITCHYARD-INSTALL ALARM MANAGEMENT SYSTEM		44	488	532
8029	MARTINS CREEK 69KV-INSTALL ALARM MANAGEMENT SYSTEM		3	403	406
8030	MARTINS CREEK 230KV-INSTALL ALARM MANAGEMENT SYSTEM		3	545	548
8031	SUNBURY 500-230KV SUBSTATION-INSTALL ALARM MANAGEMENT SYSTEM	19	175		194
8040	LACKAWANNA 230KV SUBSTATION-REPLACE TWO CIRCUIT BREAKERS		27	245	272
8042	NORTHERN PL 500KV TRANSMISSION-REPLACE PRIMARY #1 PILOT RELAY SCHEME (PHASE I AND II)	700	2698	5155	8553
8043	BRUNNER ISLAND SES-REPLACE 230KV SWITCHYARD DISCONNECTS	662	178		840
8044	JUNIATA 500KV SUBSTATION-UPGRADE BREAKER FAILURE PROTECTION		16	203	219
8049	SUSQUEHANNA 230KV-REPLACE 2 BAY 3 CB'S AND 5 ATB CB'S	47	664	477	1188
8081	MARTINS CREEK 230KV SWITCHYARD-REPLACE CBS IN BAY 1	54	496		550
8680	BUSHKILL SWITCHING STATION-BLOOMING GROVE 230-69 SUB-REPL TONE RELAY EQUIP., INSTALL PT'S & UPGRADE MISC. STATION EQUIPMENT	81	676		757

1996 CAPITAL CONSTRUCTION BUDGET
BULK POWER TRANSMISSION
LIST OF PROJECTS

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
8700	MARTINS CREEK, NORTHWOOD & QUARRY SUBS-UPGRADE TONE RELAY SCHEMES	104	892		996
9009	FRACKVILLE-SIEGFRIED 230KV LINE-RECONDUCTOR FOR HIGHER CAPACITY		330	6185	6515
9970	BULK POWER IMPROVEMENTS		309		309
9990	BULK POWER PROJECTS-UNIDENTIFIED		516		516
	TOTAL BULK POWER TRANSMISSION	1667	7027	13701	22395

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
	REGIONAL SUPPLY				
10001	FRACKVILLE-EXCHANGE/EXCHANGE-CENTRALIA-UPGRADE TO KENRO AND LINE REMOVAL (4.5 MI.) < < OLD BI # 40073 > >	118	128		246
10002	EXCHANGE 69KV SWITCHING STATION REMOVAL AND INSTALL NEW CONTROL CUBICLE AND SCADA < < OLD BI # 40074 > >	552	62		614
10003	FRACKVILLE-FISHBACH #3 69KV LINE RECONSTRUCT 2.5 MILES TO 138KV D/C FROM OAK HILL SUBSTATION TO FISHBACH < < OLD BI # 40075 > >	352	41	1642	2035
10006	GIRARDVILLE 138KV TAP LINE-1.0 MILE < < OLD BI # 40080 > >	53	35	1106	1194
10008	ELDRED-PINE GROVE 69KV LINE-PHASE 1-RECONSTRUCT SECTION FROM ELDRED TO HEGINS TO 138 (5.7 MI) < < OLD BI # 40082 > >	106	148	3611	3865
10018	SUNBURY-COLUMBIA 69KV LINE - REPLACE OHGW FOR 5.2 MI. FROM SUNBURY TO POINT TAP	8	79		87
10023	ELDRED-GOWEN CITY 69KV LINE-RECONDUCTOR 2/0 COPPER PORTION		52	837	889
10086	BERWICK SUBSTATION-UPGRADE 69KV RELAYING AND OTHER FACILITIES	250	42	715	1007

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
10087	SUNBURY SES-REPLACE CONTROL CABLES AND UPGRADE 69KV, 132KV AND 230KV RELAY AND CONTROL FACILITIES AND REPLACE 230KV SCADA	30	111	4042	4183
10090	LYCOMING-LOCK HAVEN 1&2 69KV LN-RECONSTRUCT PART 1	2597	411	4657	7665
10091	LYCOMING-LOCK HAVEN 1&2 69KV LN-RECONSTRUCT PART 2	839	787	5948	7574
10096	FISHBACH-PINE GROVE 69KV LINE-RECONST THE CRESSONA TIE-PINE GR SECT (8.85 MI.) FOR 138 DBL CKT << OLD BI # 40045 >>		67	5298	5365
	TOTAL REGIONAL SUPPLY	4905	1963	27856	34724
	AREA SUPPLY				
10503	WOOLRICH 69-12KV SUBSTATION-ADDITIONAL 12KV LINE AND TERMINAL	14	172		186
11421	WILLIAMSPORT 69-12KV SUBSTATION-INSTALL BREAKER FAILURE PROTECTION ON 12KV CIRCUIT BRKRS AND REPL SCADA AT SUB & CTG << OLD BI # 12721 >>	64	643		707
11712	KENMAR 12-02 12KV LINE-RECONDUCTOR 0.71 MI. 4/0 ACSR THREE PHASE PORTIONS		8	81	89

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
12114	HUGHESVILLE 70-02 12KV LINE-RECONDUCTOR, RELOCATE AND ADD PHASE TO BEAVER LAKE TAP	33	340		373
12115	HUGHESVILLE 70-02-ADD PHASE CLARKSTOWN TAP AND ADD PHASE/ RECONDUCTOR CHESTNUT GROVE TAP	21	232		253
13605	POINT 42-02 12KV LINE-RECONDUCTOR APPROX. 1.7 MILES OF THE WINFIELD TAP << OLD BI # 15605 >>	20	190		210
14206	PENNS 69-12KV SUBSTATION-RECONDUCTOR A PORTION OF THE 74-NEW 12KV LINE << OLD BI # 16806 >>		6	72	78
15708	WEST BERWICK 69-12KV SUB-RECOND A PORTION OF THE BRANDT MILLS 12KV TAP << OLD BI # 19108 >>		3	25	28
16914	SHAMOKIN 4KV-CONVERT THE UNIONTOWN FEEDER TO 12KV (PART II) << OLD BI # 43314 >>	15	194		209
17003	NORTH SHAMOKIN 69-12KV SUB & 12KV CONNECTING LINES << OLD BI # 43503 >>		36	903	939
17711	ALTAMONT 69-12KV SUBSTATION-RECONDUCTOR 25-2 LINE << OLD BI # 44511 >>		3	41	44

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
17801	GIRARDVILLE 69-12KV SUB AND 12KV LINE CONNECTIONS		3	787	790
	<< OLD BI # 44701 >>				
19016	WADESVILLE 4KV SYSTEM-CONV TO 12KV	4	42		46
	<< OLD BI # 47916 >>				
	TOTAL AREA SUPPLY	171	1872	1909	3952
	TOTAL SUSQUEHANNA REGION	5076	3835	29765	38676

1996 CAPITAL CONSTRUCTION BUDGET
NORTHEAST DIVISION - SCRANTON AREA
LIST OF PROJECTS

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
	REGIONAL SUPPLY				
20043	LACKAWANNA-PECKVILLE #2 AND LACKAWANNA-SUBURBAN DOUBLE CIRCUIT 69KV LINE-RECONSTRUCT FOR DOUBLE CIRCUIT 138KV	73	681		754
20044	LACKAWANNA-PECKVILLE #1 69KV LINE-RECONSTRUCT FOR DOUBLE CIRCUIT 138KV	46	80	1855	1981
20046	JENKINS-MINOOKA #1&2-RECONSTRUCT FOR 138KV	304	412	560	1276
20047	MONTAGE 138KV TAP-1.5 MI.	373	399		772
20049	LACKAWANNA-CONSTRUCT 230-138KV SUBSTATION	200	721	8361	9282
20052	LACKAWANNA-SCRANTON #1 AND #2 69KV LINES-UPGRADE AT SCRANTON SUBSTATION	12	114		126
20053	LACKAWANNA-EAST CARBONDALE LINE-RECONSTRUCT FOR DOUBLE CIRCUIT 138KV		150	3728	3878
20054	HILL 138KV TAP	17	12	800	829
	TOTAL REGIONAL SUPPLY	1025	2569	15304	18898
	AREA SUPPLY				
20719	EAST CARBONDALE 12-3-CREAMTOWN 4KV-CONVERT TO 12KV (PART 3)	7	125		132

BJ NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
20720	EAST CARBONDALE 12-3 LINE-CURTIS VALLEY/CREAMTOWN 4KV TO 12KV FINAL CONVERSION		21	364	385
21505	EDELLA 69-12KV SUBSTATION-ADDITIONAL 12KV LINE AND TERMINAL, CONVERT TO TWIN "A" OPERATION		29	346	375
21506	CONSTRUCT A THREE PHASE TIE BETWEEN THE EDELLA 21-2 12KV LINE AND THE EYNON 16-1 12KV LINE	6	69		75
23709	KEYSER AVE. 74-3 12KV LN-RECONDUCTOR		1	17	18
23710	KEYSER AVENUE 69-12KV SUBSTATION ADDITIONAL 12KV LINE AND TERMINAL AND CONVERT TO TWIN A AND ADD SCADA		43	503	546
24301	HILL 69-12KV SUBSTATION AND 12KV LINE CONNECTIONS, INSTALL SCADA	21	154	831	1006
24436	SCRANTON LTN-REBUILD MANHOLE #191	10	97		107
24440	SCRANTON LTN-5TH CABLE BACKUP	157	768	2571	3496
24702	CEDAR AVENUE 69-12KV SUBSTATION-ADDITIONAL 12KV LINE AND TERMINAL AND LTN BACKUP	23	250		273
25101	MONTAGE 138-12KV SUBSTATION 12KV CONNECTING LINES AND SCADA	288	791		1079

1996 CAPITAL CONSTRUCTION BUDGET
NORTHEAST DIVISION - SCRANTON AREA
LIST OF PROJECTS

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
25302	MOSCOW 69-12KV SUB-ADD'L 12KV LINE & TERMINAL & INCREASE TRANSFORMER CAPACITY AND ADD SCADA		28	334	362
	TOTAL AREA SUPPLY	512	2376	4966	7854
	TOTAL SCRANTON REGION	1537	4945	20270	26752

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
	REGIONAL SUPPLY				
30054	KIMBLES 138KV TAP (0.5 MILE)	146	43	259	448
	TOTAL REGIONAL SUPPLY	146	43	259	448
	AREA SUPPLY				
31104	WEST DAMASCUS 69-12KV SUBSTATION 60-1 12KV LINE-RECONDUCTOR AND REBUILD A PORTION OF THE ABRAHAMSVILLE TAP	13	119		132
31219	KIMBLES 69-12KV SUBSTATION-(WALLENPAUPACK 39-4 LINE)-SANDY SHORE TAP ADDITIONAL PHASE	2	34		36
32109	VARDEN 69-12KV SUBSTATION-46-3 LINE PINK TAP TRANSFERRED TO 46-2 LINE GRAVITY TAP		13	171	184
33005	NEWFOUNDLAND 69-12KV SUBSTATION-RECONDUCTOR AND RELOCATE PORTIONS OF 83-1		45	466	511
33205	TAFTON 69-12KV SUBSTATION 80-1 LINE-CLOUD CREST TAP-INSTALL ADDITIONAL PHASE	4	54		58
33701	KIMBLES 69-12KV SUBSTATION AND 12KV CONNECTING LINES AND INSTALL SCADA	631	89	848	1568

1996 CAPITAL CONSTRUCTION BUDGET
NORTHEAST DIVISION - HONESDALE AREA
LIST OF PROJECTS

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
33915	WALLENPAUPACK 69-12KV SUBSTATION REMOVE SUBSTATION AND CONNECTING LINES	87	4	340	431
	TOTAL AREA SUPPLY	737	358	1825	2920
	TOTAL NORTHEAST DIVISION - HONESDALE	883	401	2084	3368

1996 CAPITAL CONSTRUCTION BUDGET
NORTHEAST DIVISION - HAZ/W B AREA
LIST OF PROJECTS

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
	REGIONAL SUPPLY				
40084	JENKINS-HARWOOD #1 69KV LINE-RECONSTRUCT JENKINS-WILKES-BARRE SECTION (11.2 MILES) FOR 138KV	69	324	4098	4491
40087	EAST PALMERTON-WAGNERS 69KV LINE RECONSTRUCT FOR DOUBLE CIRCUIT OPERATION FROM CHRISTMANS TO LAKE HARMONY-9.1 MILES (PART 2) & CONV LAKE HARMONY TO "TWIN A"	3374	1996		5370
40090	JENKINS 230/138 KV SUBSTATION CONSTRUCTION		68	5492	5560
40097	NUREMBURG 138KV TAP		21	1749	1770
	TOTAL REGIONAL SUPPLY	3443	2409	11339	17191
	AREA SUPPLY				
40522	WILKES BARRE LTN-RETOP 10 MANHOLES #9	13	126		139
41506	HICKORY RUN 69-12KV SUBSTATION-INSTALL SCADA, NEW LINE AND TERMINAL, ADD'L TRANSFORMER CAPACITY < < OLD BI # 46806 > >		60	546	606
43412	WEISSPORT 69-12KV SUBSTATION-ADDITIONAL 12KV LINE AND TERMINAL < < OLD BI # 49812 > >	322	294		616
	TOTAL AREA SUPPLY	335	480	546	1361
	TOTAL NORTHEAST DIVISION - HAZ / WB	3778	2889	11885	18552

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
	REGIONAL SUPPLY				
50034	REBUILD SEIDERSVILLE-QUAKERTOWN 69KV	910	1442	14126	16478
50053	SIEGFRIED-HAUTO #4 69KV LINE-RECONDUCTOR THE SECTION FROM SIEGFRIED SUB TO SOUTH SLATINGTON SUB (5.5 MILES)		94	1004	1098
50058	HENRYVILLE 138KV TAP (3.7 MILES)	613	254	2354	3221
	<< OLD BI # 30053 >>				
50061	QUARRY-ELLIOTT HEIGHTS #1 AND #2 69KV LINES-INSTALL AIRBREAK SWITCHES	9	82		91
	TOTAL REGIONAL SUPPLY	1532	1872	17484	20888
	AREA SUPPLY				
50717	WAGNERS 69-12KV SUBSTATION-NEW 12KV LINE AND TERMINAL AND CONVERT TO TWIN A	30	453		483
	<< OLD BI # 35717 >>				
50814	LAKE NAOMI 86-1 LINE-HEMLOCK DRIVE TAP-ADDITIONAL PHASES	5	96		101
	<< OLD BI # 36014 >>				
50815	LAKE NAOMI 86-3 LINE-HEMLOCK/ HILLCREST TAPS-ADDITIONAL PHASES	3	45		48
	<< OLD BI # 36015 >>				

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
50917	MT. POCONO 64-1 LINE-INSTALL THREE PHASE ON ACE CORNERS TAP	8	134		142
	<< OLD BI # 36117 >>				
51001	HENRYVILLE 69-12KV SUBSTATION AND 12KV LINE CONNECTIONS AND INSTALL SCADA	10	264	1545	1819
	<< OLD BI # 36301 >>				
51214	TANNERSVILLE 57-1 12KV LINE-INSTALL ADDITIONAL PHASE ON NEOLA TAP	13	125		138
	<< OLD BI # 36614 >>				
51304	BARTONSVILLE 79-1 12KV LINE-RECONDUCTOR AND ADDITIONAL 12KV LINE AND TERMINAL	20	210		230
	<< OLD BI # 36804 >>				
51717	GILBERT 78-1 LINE-INSTALL TWO ADDITIONAL PHASES ON KUHENBEAKER TAP		21	277	298
	<< OLD BI # 38817 >>				
51723	GILBERT 69-12KV SUBSTATION 78-1 LINE-RECONDUCTOR 12KV LINE	11	101		112
	<< OLD BI # 38823 >>				
52508	SCHNECKSVILLE 138-12KV SUB-RECONDUCTOR 37-1 12KV LINE	4	45		49
52509	SCHNECKSVILLE 138-12KV SUB RECONDUCTOR 37-2 12KV LINE	3	63		66
52707	FOGELSVILLE 69-12KV SUBSTATION-ADDITIONAL 12KV LINE AND TERMINAL		23	250	273

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
52812	CRACKERSPORT 69-12KV SUBSTATION-RECONDUCTOR 1.1 MILE OF 05-2 LINE-GUTHSVILLE TAP	9	113		122
53412	WEST ALLENTOWN 69-12KV SUB-REPLACE 54-5 12KV OCB AND ASSOCIATED DISCONNECT SWITCHES << OLD BI # 53012 >>		8	79	87
53619	SUMNER 69-12KV SUBSTATION-RECONDUCTOR 0.5 MILE OF THE 43-7 LINE		3	33	36
54026	ALLENTOWN 138-12KV SUBSTATION-REPLACE DETERIORATED A-CABLE SECTIONS AND INSTALL A NEW A-CABLE		77	718	795
54313	EMMAUS 69-12KV SUBSTATION-ADD THIRD PHASE TO 13-3 LINE-VERA CRUZ TAP		7	80	87
54602	ALTON PARK 69-12KV SUBSTATION-ALTON PARK 63-1 AND 2 UG TIE		7	61	68
55205	TREICHLERS 69-12KV SUBSTATION-BUILD TIE BETWEEN 48-1 & 48-2 LINE	16	199		215
55810	NORTH BETHLEHEM 69-12KV SUBSTATION-NORTH BETHLEHEM 30-2 12KV LINE-RECONDUCTOR AND TIE TO THE CATASAUQUA 07-3 12KV LINE		2	42	44
56013	MACADA 69-12KV SUBSTATION-RECONDUCTOR 0.6 MILE OF 26-1 12KV LINE		6	73	79

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
56207	ELLIOTT HEIGHTS SUBSTATION-CONSTRUCT A NEW PAXTON TYPE, MODIFIED TYPE B 12KV YARD AND INSTALL SCADA, RECOND/REBLD 12-2 AND 12-5 12KV LINES	757	300		1057
56308	MINSI TRAIL 69-12KV SUBSTATION-RELOCATE THE 25-4 12KV LINE AND REMOVE 25-3/4/5 12KV LINE OFF THE TOWPATH << OLD BI # 55308 >>	16	213		229
56610	COOPERSBURG 69-12KV SUBSTATION-RECONSTRUCT THE 09-2 12KV LINE		13	201	214
56611	COOPERSBURG 69-12KV SUBSTATION-RECONSTRUCT THE 09-3 12KV LINE		7	114	121
57204	EAST GREENVILLE 10-1 3PH RECONSTRUCTION	12	124		136
57305	UPPER HANOVER 69-12KV SUB-REPLACE 51-2 12KV OCB AND ASSOCIATED DISCONNECT SWITCHES << OLD BI # 57105 >>		2	46	48
57307	UPPER HANOVER 69-12KV SUBSTATION RECONDUCTOR AND ADD PHASE TO 51-3 12KV LINE-0.4 MILES	5	108		113
58207	FRANCONIA 69-12KV SUBSTATION-ADD THIRD PHASE TO MORWOOD TAP ON 18-4 12KV LINE	4	47		51
	TOTAL AREA SUPPLY	926	2816	3519	7261
	TOTAL LEHIGH REGION	2458	4688	21003	28149

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
	REGIONAL SUPPLY				
60069	WEST SHORE-CARLISLE #1 & #2-RECONSTRUCT MECHANICSBURG TO CARLISLE SECTION	5380	763		6143
60074	WEST SHORE-HARRISBURG 1&2 LINES-RECONSTRUCT HARRISBURG-ROSEMONT SECTION	900	103	4897	5900
60081	WEST CARLISLE AND MT. ROCK 69KV TAP LINES-REHABILITATION	580	546	857	1983
60086	JUNIATA-RICHFIELD 69KV-REBUILD NEWPORT TO THOMPSONTOWN SECTION	73	264	3182	3519
60087	WEST SHORE-HARRISBURG #1 AND CUMBERLAND-WEST SHORE #1 69KV RECONDUCTOR SECTION		28	255	283
60088	HUMMELSTOWN 230-69KV SUBSTATION REPLACE TRANSFORMER 3	169	1567		1736
60090	HUMMELSTOWN 230-69KV SUBSTATION-RECONNECT TRANSFORMER #1		72	667	739
	TOTAL REGIONAL SUPPLY	7102	3343	9858	20303
	AREA SUPPLY				
61505	DALMATIA 69-12KV SUBSTATION-ADDITIONAL 12KV LINE AND TERMINAL AND SCADA		18	177	195

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
61506	DALMATIA 69-12KV SUBSTATION-RELOCATE 36-2 12KV LINE	30	304		334
62209	WILLIAMSTOWN 69-12KV SUBSTATION-ADDITIONAL 12KV LINE AND TERMINAL AND ADD SCADA		22	217	239
64308	MT. ALLEN 69-12KV SUBSTATION-ADDITIONAL 12KV LINE AND TERMINAL		20	799	819
65810	ROSEMONT 69-12KV SUBSTATION-ADDITIONAL TRANSFORMER CAPACITY AND SCADA	17	142		159
66111	ROCKVILLE SUB-RELAY AND BREAKER UPGRADE AND ADD SCADA		41	383	424
66112	ROCKVILLE 69-12KV SUBSTATION-REPLACE OIL FILLED CABLE ON 65-1 LINE		32	406	438
66405	NORTH HARRISBURG 69-12KV SUBSTATION-ADDITIONAL 12KV LINE AND TERMINAL	21	189		210
66717	WALNUT 12KV SYSTEM, SPLIT HARRISBURG LTN SYSTEM SOUTH SECTION ELECTRICAL WORK, PART 3	49	457		506
66718	WALNUT 12KV SYSTEM, SPLIT HARRISBURG LTN SYSTEM SOUTH SECTION ELECTRICAL WORK, PART 4	12	495		507
66719	WALNUT 69-12KV SUBSTATION-ELECTRICAL WORK, PART 2	9	170		179

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
66720	WALNUT 69-12KV SUBSTATION-ELECTRICAL WORK, PART 3		82		82
66721	WALNUT 69-12KV SUBSTATION-INSTALL 69KV CAPACITOR BANKS		39	361	400
67114	HARRISBURG 69-12KV SUBSTATION-REPLACE OVERDUTIED BREAKERS AND REPLACE SCADA REMOTE	34	313		347
67706	LINGLESTOWN 69-12KV SUBSTATION-INCREASE TRANSFORMER CAPACITY MODIFIED TWIN A AND ADD SCADA	21	194		215
68003	DEVONSHIRE 69-12KV SUBSTATION AND 69KV AND 12KV LINE CONNECTIONS AND SCADA		42	1134	1176
68505	DUKE 69-12KV SUBSTATION-ADDITIONAL 12KV LINE AND TERMINAL AND SCADA	18	404		422
68703	RUTHERFORD 69-12KV SUBSTATION-ADDITIONAL 12KV LINE AND TERMINAL AND SCADA	44	403		447
69705	SWATARA 69-12KV SUBSTATION-ADDITIONAL 12KV LINE AND TERMINAL	28	217		245
69815	VIAN 59-1 LINE-CONVERT FROM 4KV TO 13KV		23	266	289
69821	VIAN 4KV SYSTEM-CONVERT TO 13KV-STAFFORD HEIGHTS AREA		23	208	231
	TOTAL AREA SUPPLY	283	3630	3951	7864
	TOTAL HARRISBURG REGION	7385	6973	13809.	28167

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
	REGIONAL SUPPLY				
70009	MORGANTOWN 2-KINZER 13 TIE RECONDUCTOR (7.8 MILES)	30	108	811	949
70015	WEST HEMPFIELD 230-138KV SUBSTATION	3919	6629		10548
70016	SOUTH AKRON 230-138KV SUBSTATION	7331	4996		12327
70017	WEST HEMPFIELD-SOUTH MANHEIM #1& 2 69KV LINE-CONVERT TO 138KV OPERATION FROM WEST HEMPFIELD TO PRINCE (9.5 MI.)	479	1533		2012
70022	SOUTH AKRON 230-69KV SUBSTATION-UPGRADE MISCELLANEOUS RELAY AND CONTROL EQUIPMENT	13	15	264	292
70025	WEST HEMPFIELD-SOUTH MANHEIM 69KV TIE LINE (PENN CASTINGS TAP TO KELLOGG TAP) 1.6 MILES	230	433	695	1358
70026	SOUTH AKRON-EARL 69KV LINE	230	225	10615	11070
70027	SOUTH AKRON-MORGANTOWN #2 69KV LINE-RECONDUCTOR KINZER 13 TIE TO MORGANTOWN SUBSTATION (10.0 MILES)	1112	414		1526
70028	SOUTH AKRON-MORGANTOWN #1 69KV LINE-RECONDUCTOR EARL #1 TAP TO MORGANTOWN SUBSTATION (11.2 MILES)		142	2344	2486
70029	NEW MORGAN 69KV TAP LINE	174	236	1092	1502

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
70038	WEST HEMPFIELD-HUMMELSTOWN 69KV LINE-REBUILD NORTH COLUMBIA TAP TO DONEGAL SUBSTATION (3.2 MILES)	1360	801		2161
70043	MCGOVERNVILLE 69KV TAP LINE	14	126		140
70045	ENGLESIDE-SOUTH AKRON 69KV LINE-CONVERT SECTION TO 138KV	233	2158		2391
70046	WEST HEMPFIELD-GRINNELL 69KV LINE-EXTEND TO NORTH COLUMBIA TAP (1.3 MILES)	20	185		205
70047	BERKS-SOUTH AKRON NO.1 69KV LINE RECONDUCTOR SECTION EPHRATA TAP NO. 1 TO BREAK POINT (2.4 MILES)		26	241	267
70049	BERKS-SOUTH AKRON NO.1 69KV LINE RETERMINATE AT SOUTH AKRON SUBSTATION		3	31	34
70052	MARIETTA 69-12KV SUBSTATION-PROVIDE TWO-LINE SUPPLY		5	49	54
	TOTAL REGIONAL SUPPLY	15145	18035	16142	49322
	AREA SUPPLY				
71813	ELIZABETHTOWN 69-12KV SUBSTATION RECONDUCTOR 17-1 12KV LINE		16	188	204
72205	MT. JOY 69-12KV SUBSTATION-ADDITIONAL 12KV LINE AND TERMINAL AND SCADA	22	194		216

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
73005	LITITZ 69-12KV SUBSTATION-ADDITIONAL 12KV LINE AND TERMINAL AND TWIN A		6	520	526
73309	LINCOLN 69-12KV SUBSTATION-ADDITIONAL 12KV LINE AND TERMINAL, INCREASE TRANSFORMER CAPACITY, CONVERT TO TWIN A AND SCADA	10	87	902	999
73602	REAMSTOWN 69-12KV SUBSTATION-NEW 12KV LINE AND TERMINAL		23	636	659
74707	MORGANTOWN 69-12KV SUBSTATION-ADDITIONAL 12KV LINE & TERMINAL AND UPGRADE 69KV CAPACITOR PROTECTION	16	150		166
74709	MORGANTOWN 69-12KV SUBSTATION-INCREASE TRANSFORMER CAPACITY		16	150	166
74801	NEW MORGAN SUBSTATION AND 12KV LINE CONNECTIONS	13	126	958	1097
75005	LEOLA 69-12KV SUBSTATION-CONVERT TO 138KV-PART 1 & 2	319	263	112	694
76112	HEMPFIELD 69-12KV SUBSTATION-REBUILD 38-3 12KV LINE	15	136		151
76309	DONERVILLE 69-12KV SUBSTATION-CONVERT TO TWIN A, 138KV OPERATION AND ADD 138KV SWITCHES PART 1 & 2	329	284	122	735

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
76606	ROHRERSTOWN 69-12KV SUBSTATION- CONVERT TO TWIN A, 138KV OPERATION AND ADD SCADA PART 1 & 2	268	276	119	663
76801	MCGOVERNVILLE 69-12KV SUBSTATION AND 12KV CONNECTING LINES AND SCADA	770	1480		2250
77113	PRINCE 69-12KV SUBSTATION- CONVERT TO 138KV	2123	2060		4183
77212	LANCASTER LTN- REBUILD PRINCE-KING VAULT #147	18	178		196
77218	LANCASTER LTN- REBUILD PRINCE-KING VAULT #193	15	151		166
77409	EAST LANCASTER 69-12KV SUB- CONVERT TO 138KV-PART 1 & 2	278	293	125	696
77704	NORTH BRIDGEPORT 69-12KV SUB- CONVERT TO TWIN A, 138KV OPERATION AND ADD SCADA PART 1 & 2	270	279	120	669
78110	MILLERSVILLE 69-12KV SUBSTATION- ADDITIONAL 12KV LINE AND TERMINAL	23	216		239
78210	WEST WILLOW 69-12KV SUBSTATION- RECONDUCTOR 75-2 12KV LINE	3	48		51
78905	MOUNT NEBO 69-12KV SUBSTATION- RECONDUCTOR 48-1 12KV LINE	27	254		281

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
78906	MOUNT NEBO 69-12KV SUBSTATION-REBUILD 48-2 12KV LINE	11	166		177
	TOTAL AREA SUPPLY	4530	6702	3952	15184
	TOTAL LANCASTER REGION	19675	24737	20094	64506

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
81101	REGIONAL SUPPLY-UPGRADE SUBSTATION CAPACITOR BANK PROTECTION SCHEMES		208		208
81102	REGIONAL SUPPLY IMPROVEMENTS		309		309
81103	RELOCATION DUE TO R/W REQUIREMENTS-TRANSMISSION		412		412
81104	POLE REPLACEMENTS-69KV AND ABOVE		824		824
81106	NUG CONNECTED TO THE REGIONAL SUPPLY SYSTEM-ENGINEERING FOLLOWUP AND TECHNICAL REVIEW		25		25
81109	REGIONAL 69KV AND 138KV LINES-IMPROVE GROUND CLEARANCE TO MAINTAIN LINE RATINGS		240		240
81111	REGIONAL SUPPLY SUBSTATIONS-DC STATION SERVICE IMPROVEMENTS		52		52
81113	SYSTEM - VARIOUS LOCATIONS MODIFY AND REPLACE AB SWITCHES TO OBTAIN PARALLEL BREAK CAPABILITIES		114		114
81115	PURCHASE POWER CIRCUIT BREAKERS-REGIONAL AND BULK POWER		2333		2333
81119	REPLACE DETERIORATED UPSWEPT ARMS-69KV AND ABOVE		464		464
81120	LOWER STRUCTURE GROUND RESISTANCE		309		309
	TOTAL REGIONAL POOL ITEMS		5290		5290

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
80001	RELOCATION DUE TO R/W REQUIREMENTS-DISTR		4120		4120
80002	ELIMINATE VULNERABLE FACILITIES LOCATED ALONG HIGHWAYS (INCLUDING MOD POLES)		155		155
80004	AREA SUPPLY IMPROVEMENTS		824		824
80006	PURCHASE OF 69-12KV TRANS		412		412
80007	PURCHASE OF 138-12KV TRANS		1123		1123
80009	CAPITAL REPAIRS TO FAILED 69-12KV POWER TRANSFORMERS		361		361
80013	PURCHASE POWER CIRCUIT BREAKERS-AREA SUPPLY		519		519
80015	CONNECTION OF NON-UTILITY GENERATION-AREA SUPPLY		25		25
80016	AREA SUPPLY SUBSTATIONS-DC STATION SERVICE IMPROVEMENTS		82		82
80017	REPLACEMENT OF DETERIORATED UNDERGROUND DISTRIBUTION CABLE		2472		2472
80018	LOW TENSION NETWORK PRIMARY CABLE REPLACEMENT		67		67
80019	REPLACEMENT OF DETERIORATED COPPERWELD CONDUCTOR		630		630
	TOTAL AREA POOL ITEMS		10790		10790

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
81001	POLE REPLACEMENTS-23KV & UNDER		4017		4017
81002	CAPACITORS-23KV & UNDER		773		773
81003	OIL CIRCUIT RECLOSERS		1442		1442
81004	DISTRIBUTION DEPARTMENT MINOR-LINES		5047		5047
81005	DISTRIBUTION DEPARTMENT MINOR-SUBSTATION		268		268
81006	DISTRIBUTION DEPARTMENT-STORMS AND EMERGENCIES		2781		2781
81008	DISTRIBUTION DEPARTMENT - INSTALL MOV'S AND ELBOW ARRESTORS AT SPECIFIC UG CABLE LOCATIONS		834		834
81009	DISTRIBUTION DEPARTMENT-REPLACE FAILED AND/OR DETERIORATED, NON-REPAIRABLE EQUIPMENT (INCL. LTN)		1050		1050
81011	DISTRIBUTION DEPARTMENT-FOREIGN UTILITY WORK		948		948
	TOTAL AREA BLANKET ITEMS		17160		17160

	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED			
	PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
REGIONAL SUPPLY				
SPECIFIC ITEMS	33298	30234	98242	161774
POOL ITEMS		5290		5290
UNIDENTIFIED		516		516
TOTAL REGIONAL SUPPLY	33298	36040	98242	167580
AREA SUPPLY				
SPECIFIC ITEMS	7494	18234	20668	46396
POOL ITEMS		10790		10790
BLANKET ITEMS		17160		17160
UNIDENTIFIED		515		515
TOTAL AREA SUPPLY	7494	46699	20668	74861
TOTAL REGIONAL & AREA SUPPLY	40792	82739	118910	242441

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
82001	138KV AND 69KV REVENUE EXTENSIONS		1200		1200
82002	12KV REVENUE EXTENSIONS ON SPECIFIC ERS		11300		11300
82003	REVENUE EXTENSIONS ON WORK ORDERS		46000		46000
83001	STREET LIGHTING-EXTENSION OR MODERNIZATION OF EXISTING SYSTEMS		3000		3000
83003	DISTR TRANSFORMERS		14000		14000
83004	METERS		4500		4500
	TOTAL REVENUE WORK		80000		80000

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
84001	GENERATION		103		103
84002	BULK POWER TRANSMISSION		309		309
84003	REGIONAL SUPPLY		206		206
84005	GENERAL PROPERTY		103		103
TOTAL SITES & LINE RIGHT-OF-WAY			721		721

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
85014	SCHUYLKILL OFFICE FACILITY EXPANSION	50	2450		2500
85016	HARRISBURG SERVICE CENTER REPLACE HVAC SYSTEM	250	450		700
85018	GENERAL OFFICE - NORTH BUILDING ESCALATOR REPLACEMENT	50	805		855
85019	GENERAL OFFICE - TOWER BUILDING REPLACE AIR HANDLING UNIT	200	200	150	550
85020	GENERAL OFFICE - TOWER BUILDING REPLACE ELEVATOR DRIVES	25	150	275	450
85021	GENERAL OFFICE - NORTH BUILDING REPLACE CHILLER		100	585	685
85022	GENERAL OFFICE - TOWER BUILDING REPLACE WINDOWS		300	901	1201
85024	GENERAL OFFICE - NORTH BUILDING REPLACE COOLING TOWERS		100	201	301
85090	HAZLETON OPERATING AREA SERVICE CENTER	2310	2390	700	5400
85094	BETHLEHEM OPERATING AREA SERVICE CENTER		100	5640	5740
87001	OFFICE AND SERVICE BUILDINGS ADDITIONS AND REPLACEMENTS		125		125
*	BUILDING PROJECTS-ADJUSTMENT		-1100		-1100
	TOTAL GENERAL BUILDINGS	2885	6070	8452	17407

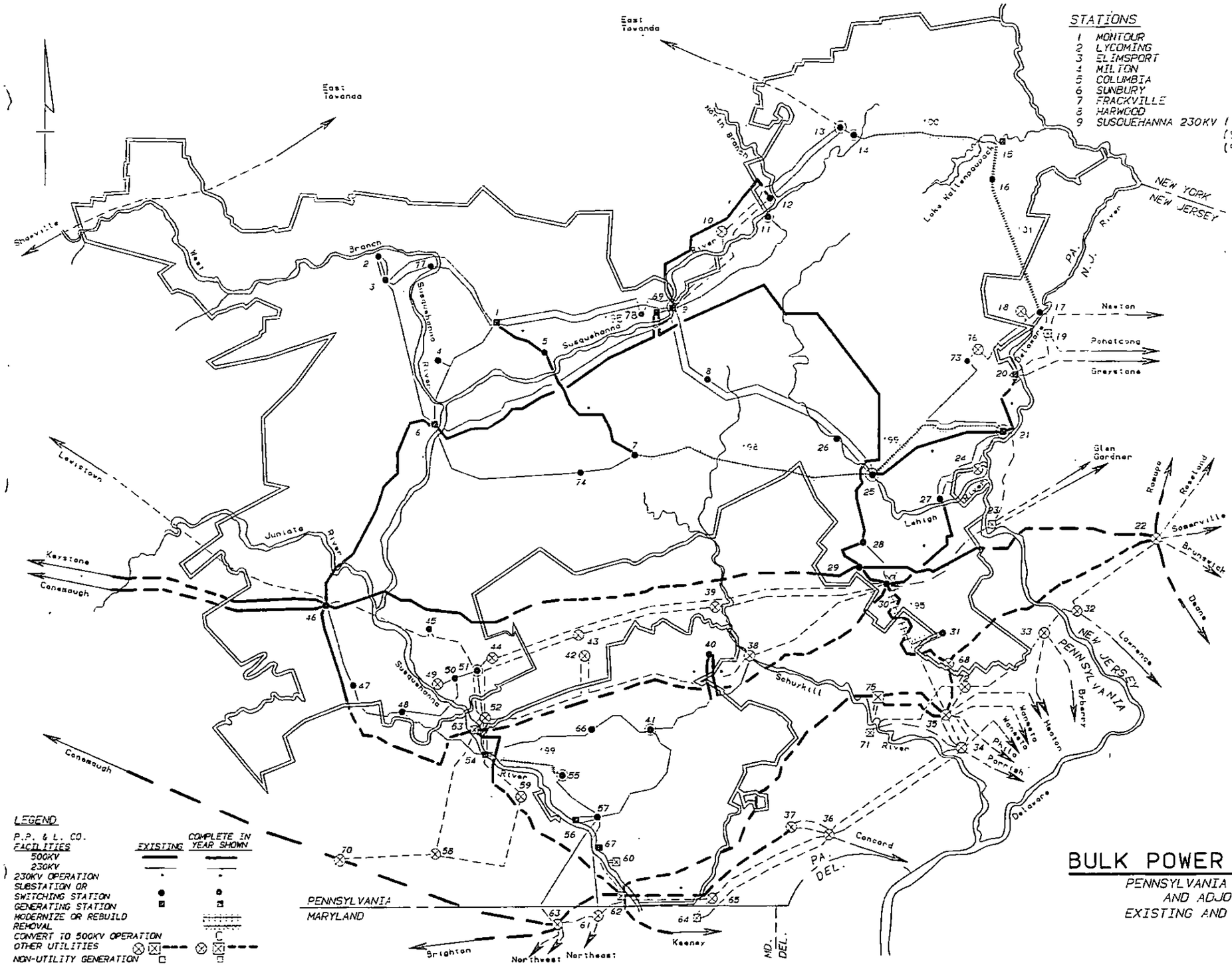
* Adjustment for unanticipated future carryovers and/or project deferrals

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
86001	COMMUNICATION SYSTEM		88		88
86003	POWER MANAGEMENT SYSTEM		838		838
86005	CAPITALIZATION OF COMPUTER SOFTWARE	45000	55500	30500	131000
86006	LEASEHOLD IMPROVEMENTS		197		197
86007	REPLACEMENT OF SUPERVISORY REMOTES - SYSTEM WIDE		1024		1024
86010	PJM-ENERGY MANAGEMENT COMPUTER SYSTEM - PL SHARE	1848	1135	3815	6798
87002	OFFICE FURNITURE & EQUIPMENT		474		474
87003	TOOLS AND EQUIPMENT		567		567
87004	FIRE EXTINGUISHERS		28		28
89001	RETIREMENTS UNDISTRIBUTED COSTS AND ADJUSTMENTS		205		205
89002	PROJECTS REQUIRING SMALL AMOUNTS TO COMPLETE		2060		2060
89003	RESEARCH AND DEVELOPMENT		103		103
	TOTAL OTHER	46848	62219	34315	143382

BI NO	PROJECT TITLE	CONSTRUCTION COSTS $ THOUSANDS - ESCALATED PRIOR TO BUDGT YR	DURING BUDGT YR	AFTER BUDGT YR	PROJECT TOTAL
220	NUCLEAR FUEL PURCHASES	52100	77200	197400	326700
	GRAND TOTAL	213582	477554	822550	1513686

APPENDIX C

MAPS



STATIONS

1	MONTOUR	
2	LYCOMING	
3	ELIMSPORT	
4	MILTON	
5	COLUMBIA	
6	SUNBURY	
7	FRACKVILLE	
8	HARWOOD	
9	SUSQUEHANNA 230KV	(98). (94). (97)
10	MOUNTAIN	
11	JENKINS	(00)
12	STANTON	
13	LACKAWANNA	(97)(99)
14	PECKVILLE	(99)
15	WALLENPAUPACK	
16	BLOOMING GROVE	
17	BUSHKILL	
18	SHAWNEE	
19	KITTATINNY	
20	PORTLAND	
21	MARTINS CREEK	(96)
22	BRANCHBURG	
23	GILBERT	
24	NORTHWOOD	
25	SIEGFRIED	(95)
26	EAST PALMERTON	
27	QUARRY	
28	WESCOSVILLE	
29	ALBURTIS	
30	HOSENSACK	
31	BUXMONT	
32	PLEASANT VALLEY	
33	BUCKINGHAM	
34	PLYMOUTH MEETING	
35	WHITPAIN	
36	BRADFORD	
37	NEWLINVILLE	
38	SOUTH READING	
39	NORTH TEMPLE	
40	BERKS	
41	SOUTH AKRON	(96)
42	SOUTH LEBANON	
43	NORTH LEBANON	
44	NORTH HERSHEY	
45	DAUPHIN	
46	JUNIATA	
47	CUMBERLAND	
48	WEST SHORE	
49	STEELTON (BETH. STEEL CO.)	
50	STEELTON	
51	HUMMELSTOWN	(96)
52	MIDDLETOWN JCT.	
53	THREE MILE ISLAND	
54	BRUNNER ISLAND	
55	WEST HEMPFIELD	(96)
56	SAFE HARBOR	
57	MANOR	
58	JACKSON	
59	YORKANA	
60	MUDDY RUN	
61	GRACETON	
62	PEACH BOTTOM	
63	CONASTONE	
64	CONOWINGO	
65	NOTTINGHAM	
66	SOUTH MANHEIM	
67	HOLTWOOD	
68	ELROY	
69	SUSQUEHANNA 500KV	
70	HUNTERSTOWN	
71	CROMBY	
72	N. WALES	
73	MONROE	
74	ELDRED	
75	LIMERICK	
76	FOXHILL	
77	CLINTON	
78	SUSQUEHANNA T-10 TAP	(95)

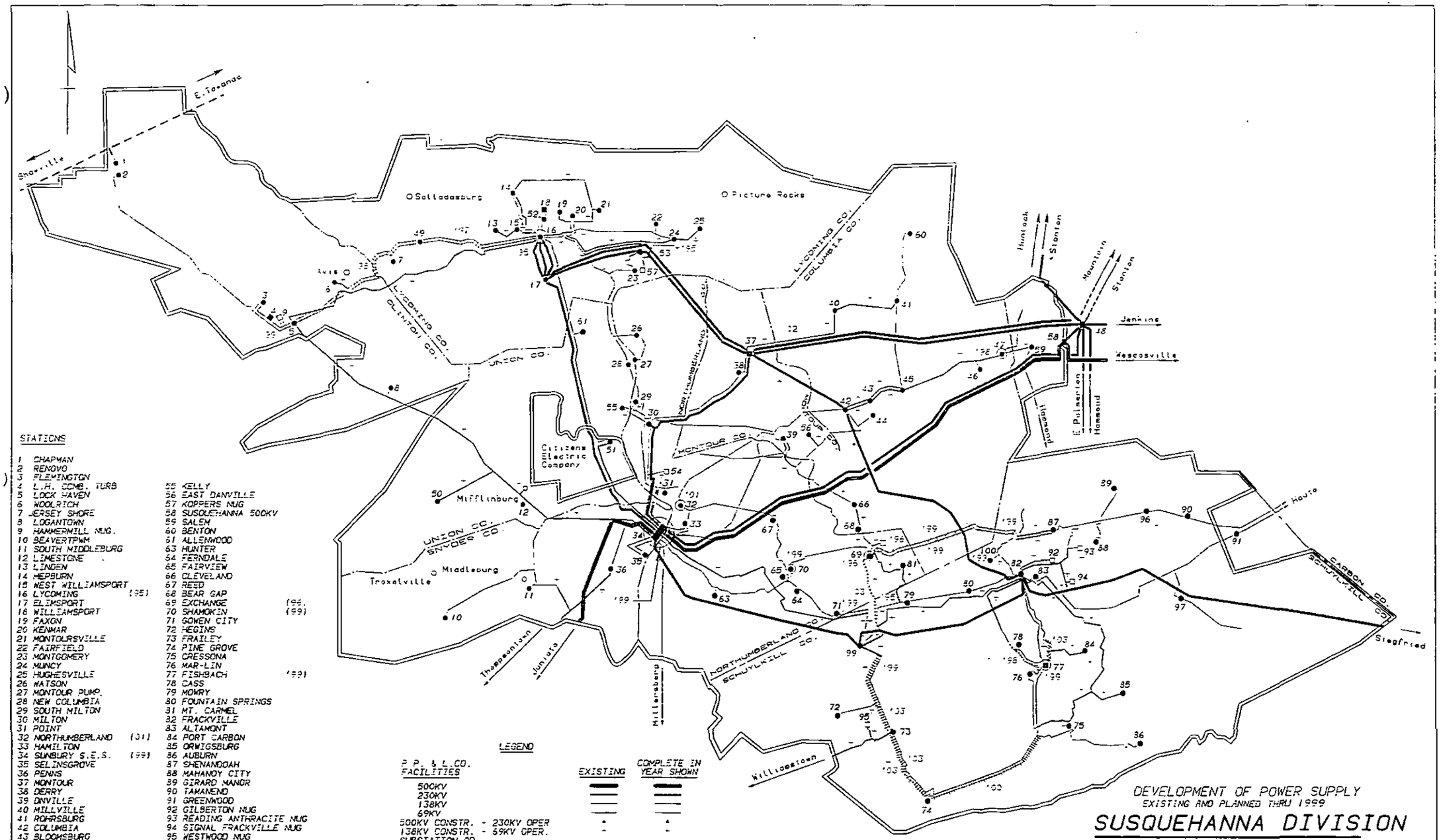
LEGEND

P.P. & L. CO. FACILITIES	EXISTING	COMPLETE IN YEAR SHOWN
500KV		
230KV		
230KV OPERATION		
SUBSTATION OR SWITCHING STATION		
GENERATING STATION		
MODERNIZE OR REBUILD		
REMOVAL		
CONVERT TO 500KV OPERATION		
OTHER UTILITIES		
NON-UTILITY GENERATION		

BULK POWER SUPPLY SYSTEM

PENNSYLVANIA POWER & LIGHT CO.
AND ADJOINING SYSTEMS
EXISTING AND PLANNED THRU 2004

LD-3000



STATIONS

1	CHAPMAN	55	KELLY
2	RENOVO	56	EAST DANVILLE
3	FLEMINGTON	57	KOPPERS NUG
4	L.H. COMB. TURB	58	SUSQUEHANNA 500KV
5	LOCK HAVEN	59	SALEM
6	WOOLRICH	60	BENTON
7	JERSEY SHORE	61	ALLENWOOD
8	LOGANTOWN	63	HUNTER
9	HAMMERMILL NUG.	64	FERNDALE
10	BEAVERTPWM	65	FAIRVIEW
11	SOUTH MIDDLEBURG	66	CLEVELAND
12	LIMESTONE	67	REED
13	LINDEN	68	BEAR GAP
14	HEPBURN	69	EXCHANGE (96,
15	WEST WILLIAMSPORT	70	SHAMOKIN (99)
16	LYCOMING (95)	71	GOWEN CITY
17	ELIMSPORT	72	HEGINS
18	WILLIAMSPORT	73	FRAILEY
19	FAXON	74	PINE GROVE
20	KENMAR	75	CRESSONA
21	MONTOURSVILLE	76	MAR-LIN
22	FAIRFIELD	77	FISHBACH '99)
23	MONTGOMERY	78	CASS
24	MUNCY	79	MOWRY
25	HUGHESVILLE	80	FOUNTAIN SPRINGS
26	WATSON	81	MT. CARMEL
27	MONTOUR PUMP.	82	FRACKVILLE
28	NEW COLUMBIA	83	ALTAMONT
29	SOUTH MILTON	84	PORT CARBON
30	MILTON	85	ORWIGSBURG
31	POINT	86	AUBURN
32	NORTHUMBERLAND (31)	87	SHENANDOAH
33	HAMILTON	88	MAHANOY CITY
34	SUNBURY S.E.S. (99)	89	GIRARD MANOR
35	SELINSGROVE	90	TAMANEND
36	PENNS	91	GREENWOOD
37	MONTOUR	92	GILBERTON NUG
38	DERRY	93	READING ANTHRACITE NUG
39	DNVILLE	94	SIGNAL FRACKVILLE NUG
40	MILLVILLE	95	WESTWOOD NUG
41	ROHRSBURG	96	DELAND
42	COLUMBIA	97	TUSCARORA
43	BLOOMSBURG	98	FOSTER WHEELER - MT CARMEL
44	WEST BLOOMSBURG	99	ELDRED
45	SCOTT	100	GIRARDVILLE '99)
46	WEST BERWICK		
47	BERWICK (95)		
48	SUSQUEHANNA 230KV		
49	LARRYS CREEK		
50	LAURELTON		
51	LEWISBURG 138KV		
52	WOUTH WILLIAMSPORT		
53	CLINTON		
54	VIKING NUG		

LEGEND

P. P. & L. CO. FACILITIES	EXISTING	COMPLETE IN YEAR SHOWN
500KV		
230KV		
138KV		
69KV		
500KV CONSTR. - 230KV OPER	*	*
138KV CONSTR. - 69KV OPER.	-	-
SUBSTATION OR SWITCHING STATION	○	●
GENERATING STATION	□	■
MODERNIZE OR REBUILD		.....
REMOVAL		//////
COMMUNITIES	○	
CONVERT TO 138KV OPERATION		‡
CONVERT TO 500KV OPERATION		‡
OTHER UTILITIES	○ ⊠ ----	○ ⊠ ---
NON UTILITY GENERATION	□	□

DEVELOPMENT OF POWER SUPPLY
EXISTING AND PLANNED THRU 1999

SUSQUEHANNA DIVISION

PENNSYLVANIA POWER & LIGHT CO.
SYSTEM PLANNING DEPARTMENT

LD-3001

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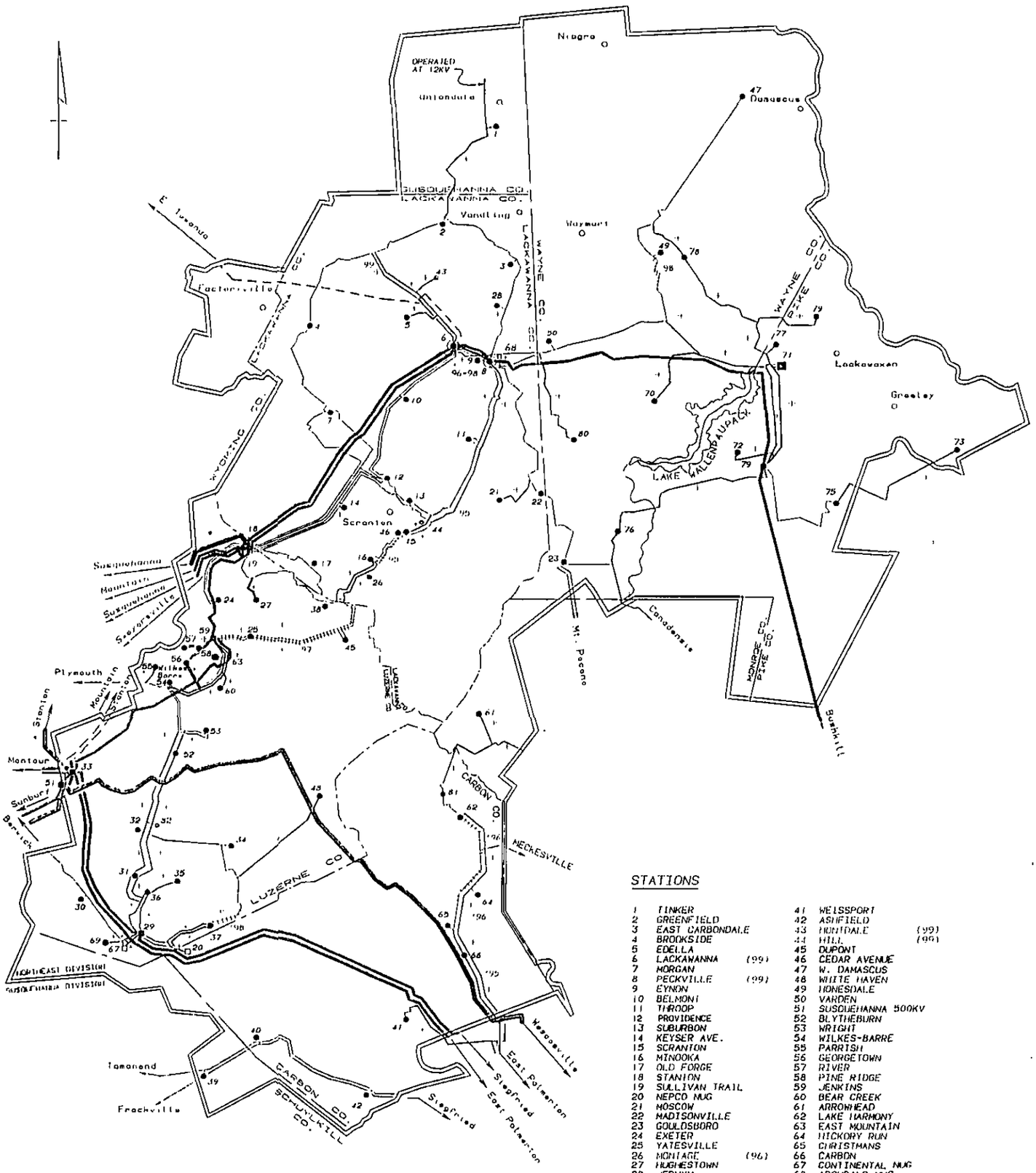


STATIONS

1	TINKER	
2	GREENFIELD	
3	EAST CARBONDALE	
4	BROOKSIDE	
5	EDELLA	
6	LACKAWANNA	(99)
7	MORGAN	
8	PECKVILLE	(99)
9	EYNON	
10	BELMONT	
11	THROOP	
12	PROVIDENCE	
13	SUBURBON	
14	KEYSER AVE.	
15	SCRANTON	
16	MINOOKA	
17	OLD FORGE	
18	STANTON	
19	SULLIVAN TRAIL	
20	NEPCO MUG	
21	MOSCOW	
22	MADISONVILLE	
23	GOULDSBORO	
24	EXETER	
25	YATESVILLE	
26	MONTAGE	(96)
27	HUGHESTOWN	
28	JERMYN	
29	HARWOOD	
30	EAST TOMHICKEN	
31	HARTLAND	
32	ST. JOHNS	
33	SUSQUEHANNA 230KV	
34	FREELAND	
35	HARLEIGH	
36	VALMONT	
37	EAST HAZELTON	
38	AVOCA	
39	GREENWOOD	
40	HAUTO	
41	WEISSPORT	
42	ASHFIELD	
43	MONTDALE	(99)
44	HILL	(99)
45	DUPONT	
46	CEDAR AVENUE	
47	W. DAMASCUS	
48	WHITE HAVEN	
49	HONESDALE	
50	VARDEN	
51	SUSQUEHANNA 500KV	
52	BLYTHEBURN	
53	WRIGHT	
54	WILKES-BARRE	
55	PARRISH	
56	GEORGETOWN	
57	RIVER	
58	PINE RIDGE	
59	JENKINS	
60	BEAR CREEK	
61	ARROWHEAD	
62	LAKE HARMONY	
63	EAST MOUNTAIN	
64	HICKORY RUN	
65	CHRISTMANS	
66	CARBON	
67	CONTINENTAL MUG	
68	ARCHBALD MUG	
69	HUMBOLDT	
70	LAKEVILLE	
71	WALLENPAUPACK	(98)
72	TAFTON	
73	TWIN LAKES	
74	BLOOMING GROVE	
75	HEMLOCK	
76	NEWFOUNDLAND	
77	KIMBLES	(97)
78	INDIAN ORCHARD	
79	BOHEMIA	
80	HAMLIN	
81	JACK FROST	(95)
82	BUTLER	(95)

LEGEND

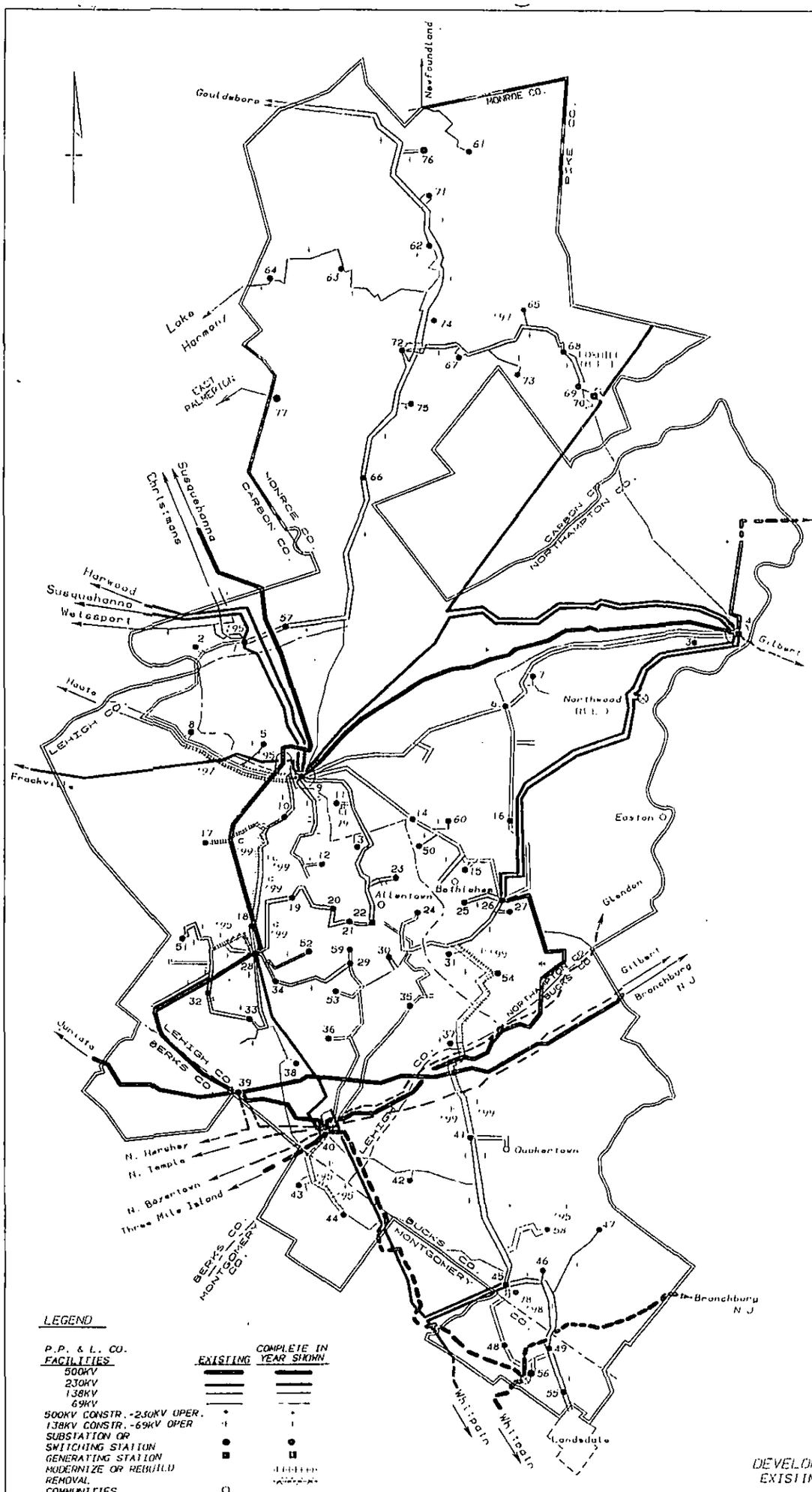
P P & L CO FACILITIES	EXISTING	COMPLETE IN YEAR SHOWN
500KV		
230KV		
138KV		
69KV		
500KV CONSTR -230KV OPER		
138KV CONSTR -69KV OPER.		
SUBSTATION OR SWITCHING STATION		
GENERATING STATION		
MODERNIZE OR REBUILD		
REMOVAL		
COMMUNITIES		
CONVERT TO 138KV OPERATION		
CONVERT TO 500KV OPERATION		
OTHER UTILITIES		
NON-UTILITY GENERATION		

DEVELOPMENT OF POWER SUPPLY
EXISTING AND PLANNED THRU 1999

NORTHEAST DIVISION

PENNSYLVANIA POWER & LIGHT CO.
SYSTEM PLANNING DEPARTMENT

LD-3004



STATIONS

1	E. PALMERTON
2	PALMERTON
3	MT. BETHEL
4	MARTINS CREEK
5	TREICHLERS
6	NAZARETH
7	CHERRY HILL
8	S. SLATINGTON
9	SIEGFRIED
10	EGYPT
11	NORTHAMPTON
12	MICKLEYS
13	CATASAUQUA
14	N. BETHLEHEM
15	MACADA
16	FARMERSVILLE
17	SCHNECKSVILLE
18	CRACKERSPORT
19	S. WHITEHALL
20	SUMNER
21	CENTRAL ALLENTOWN
22	ALLENTOWN
23	E. ALLENTOWN
24	ELLIOTT HEIGHTS
25	MINSI TRAIL
26	QUARRY
27	FREEMANSBURG
28	WESCOSVILLE
29	SALISBURY
30	S. ALLENTOWN
31	SEIDERSVILLE
32	TREXLERTOWN
33	E. TEXAS
34	W. ALLENTOWN
35	LANARK
36	EMMAUS
37	COOPERSBURG
38	MACUNGIE
39	ALBURTIS
40	HOSENSACK
41	RICHLAND
42	MILFORD
43	E. GREENVILLE
44	U. HANOVER
45	BUXMONT
46	SELLERSVILLE
47	BLOOMING GLEN
48	FRANCONIA
49	HATFIELD
50	WESTGATE
51	FOGELSVILLE
52	DORNEYVILLE
53	ALTON PARK
54	BINGEN
55	ORVILLA
56	ELROY
57	LITTLE GAP
58	RIDGE ROAD (95)
59	MACK
60	POINTE NORTH
61	CANADENSIS
62	MT. POCONO
63	LAKE NAOMI
64	WAGNERS
65	HENRYVILLE (97)
66	GILBERT
67	TANNERSVILLE
68	N. STROUDSBURG
69	STROUDSBURG
70	MONROE
71	POCONO FARMS
72	JACKSON
73	BARTONSVILLE
74	CAMELBACK
75	MC MICHAELS
76	NORTH COOLBAUGH
77	MECKESVILLE
78	TELFORD (98)
79	NORTHAMPTON BUG (95)

LEGEND

P.P. & L. CO. FACILITIES	EXISTING	COMPLETE IN YEAR SHOWN
500KV	═══	═══
230KV	═══	═══
138KV	═══	═══
69KV	═══	═══
500KV CONSTR.-230KV OPER.	•	•
138KV CONSTR.-69KV OPER	•	•
SUBSTATION OR SWITCHING STATION	●	●
GENERATING STATION	■	■
MODERNIZE OR REBUILD		
REMOVAL		
COMMUNITIES	O	
CONVERT TO 138KV OPERATION		C
CONVERT TO 500KV OPERATION		C
OTHER UTILITIES	⊘⊠---	⊘⊠---
NON-UTILITY GENERATION	□	□

DEVELOPMENT OF POWER SUPPLY
EXISTING AND PLANNED THRU 1999

LEHIGH DIVISION

PENNSYLVANIA POWER & LIGHT CO.
SYSTEM PLANNING DEPARTMENT

LD-3005

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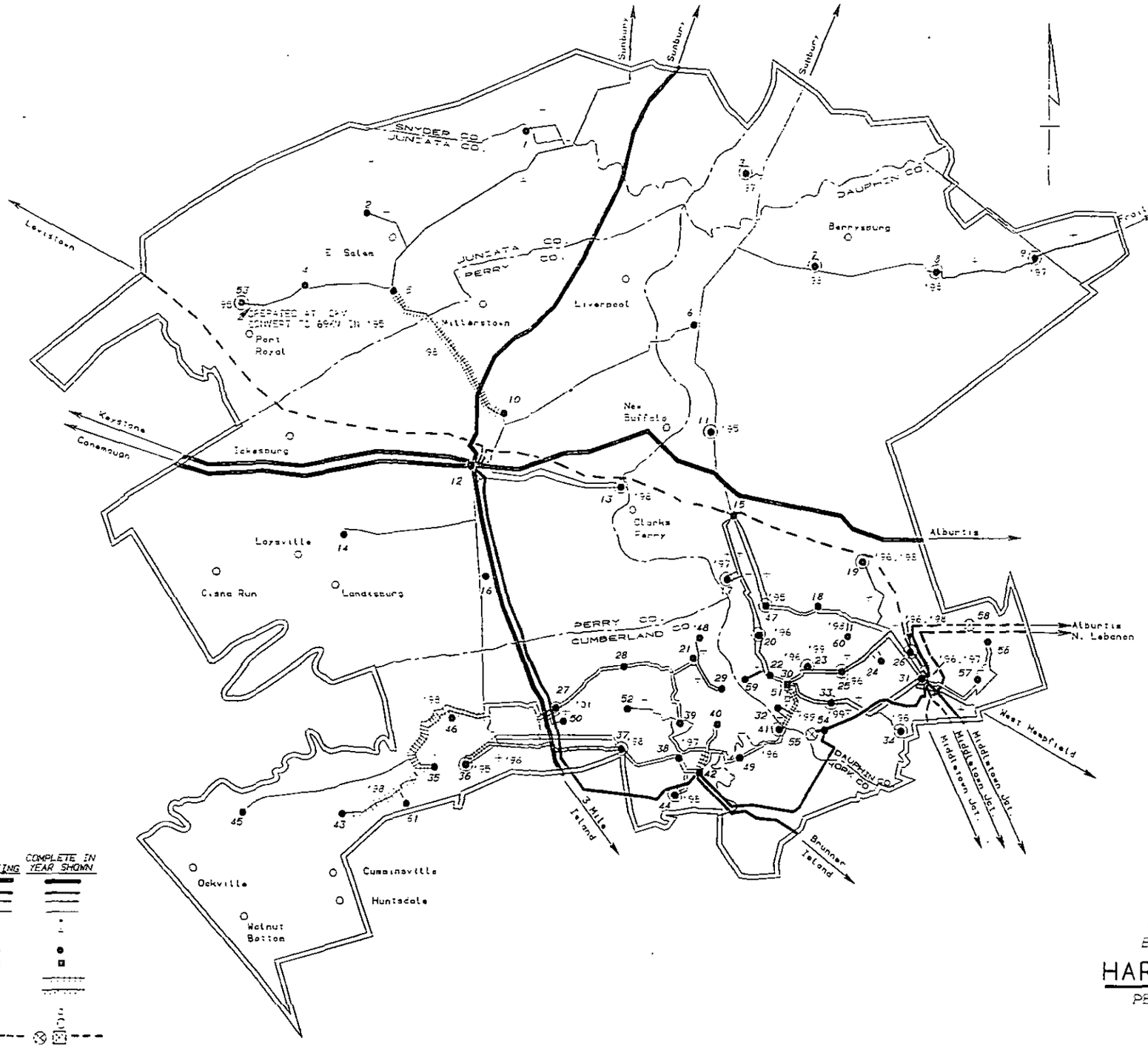


STATIONS

1	RICHFIELD	
2	MCALLISTERVILLE	
3	DALMATIA	'97
4	WALKER	
5	THOMPSONTOWN	
6	MILLERSBURG	
7	ELIZABETHVILLE	(98)
8	LYKENS	(98)
9	WILLIAMSTOWN	(97)
10	NEWPORT	
11	HALIFAX	'95
12	JUNIATA	
13	BENVENUE	'93
14	GREENPARK	
15	DAUPHIN	
16	SHERMANSDALE	
17	ROCKVILLE	(97)
18	COLONIAL PARK	
19	LINGLESTOWN	(96,98)
20	N. HARRISBURG	(98)
21	ENOLA	
22	WALNUT	
23	LAWNTON	(99)
24	PAXTON	
25	RUTHERFORD	96
26	DUKE	(96,98)
27	CUMBERLAND	
28	WERTZVILLE	
29	PENNSBORO	
30	HARRISBURG	(98)
31	HUMMELSTOWN	(96,97)
32	CEDAR	
33	OBERLIN	(98)
34	SWATARA	(98)
35	W. CARLISLE	
36	CARLISLE	(95)
37	MECHANICSBURG	(98)
38	ROSSMOYNE	
39	SPORTING HILL	
40	WHITE HILL	
41	ROSEMONT	(96)
42	WEST SHORE	
43	MOUNT ROCK	
44	MT. ALLEN	(98)
45	NEWVILLE	
46	MIDDLETON	
47	WINDSOR	(98)
48	SUMMERDALE	
49	SPANGLER	
50	NEW KINGSTOWN	
51	HARRISBURG MSW	
52	HAMPDEN	
53	MIFFLINTOWN	(95)
54	STEELTON (P.P.&L.CO.)	
55	STEELTON (BETH.STEEL CO.)	
56	HERSHEY	
57	S. HERSHEY	
58	N. HERSHEY	
59	CENTER CITY	
60	DEVONSHIRE	(96)
61	NOTTINGHAM	

LEGEND

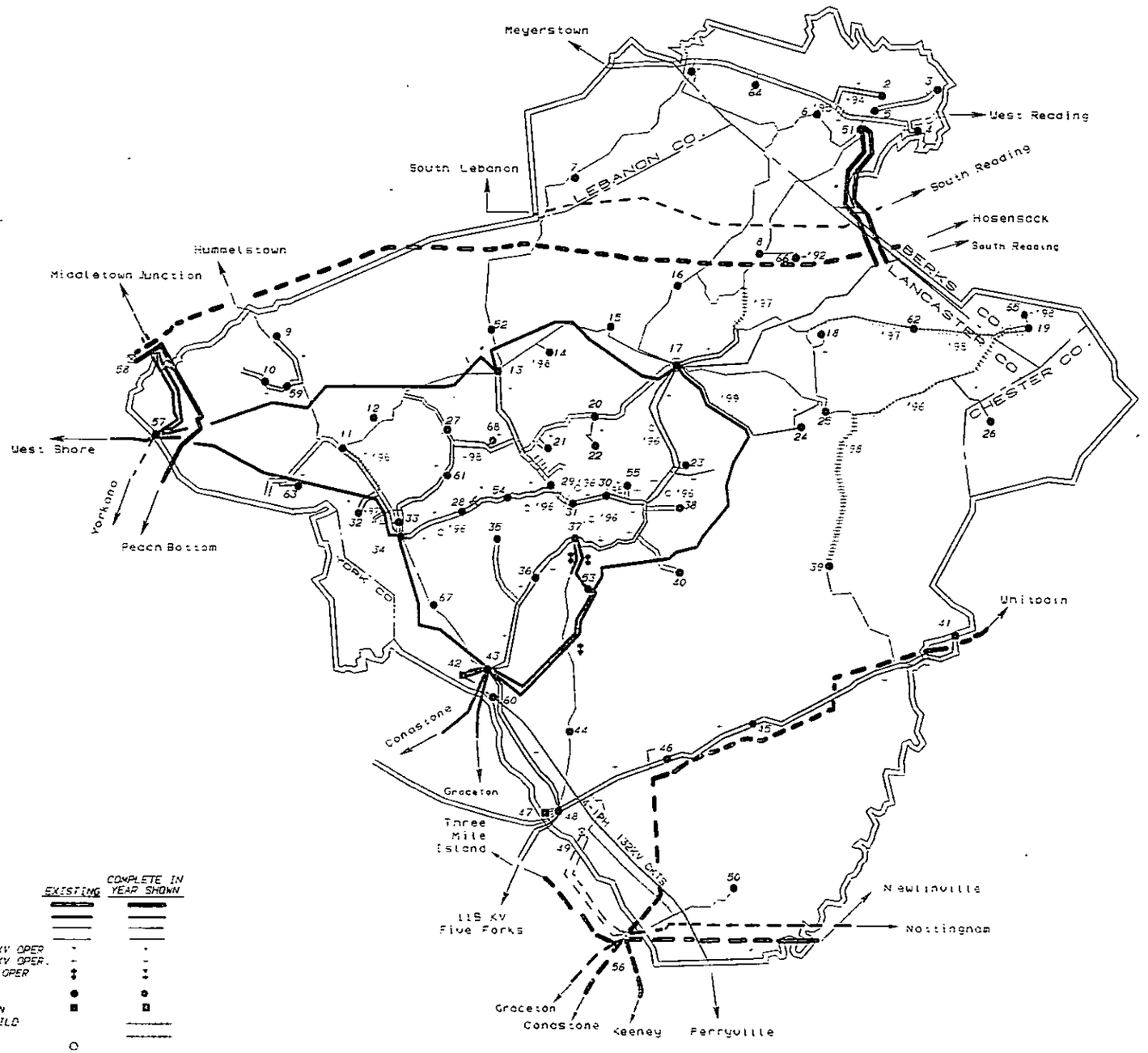
P.P. & L. CO FACILITIES	EXISTING	COMPLETE IN YEAR SHOWN
500KV		
230KV		
138KV		
69KV		
500KV CONSTR.-230KV OPER.		
138KV CONSTR.-69KV OPER.		
SUBSTATION OR SWITCHING STATION		
GENERATING STATION		
MODERNIZE OR REBUILD		
REMOVAL		
COMMUNITIES		
CONVERT TO 138KV OPERATION		
CONVERT TO 500KV OPERATION		
OTHER UTILITIES		
NON-UTILITY GENERATION		

DEVELOPMENT OF POWER SUPPLY
EXISTING AND PLANNED THRU 1999

HARRISBURG DIVISION

PENNSYLVANIA POWER & LIGHT CO.
SYSTEM PLANNING DEPARTMENT

LD-3006



LEGEND

P. P. & L. CO FACILITIES	EXISTING	COMPLETE IN YEAR SHOWN
500KV		
230KV		
138KV		
69KV		
500KV CONSTR -230KV OPER		
138KV CONSTR -69KV OPER.		
230KV CONSTR -69KV OPER		
SUBSTATION OR		
SWITCHING STATION		
GENERATING STATION		
MODERNIZE OR REBUILD		
REMOVAL		
COMMUNITIES		
CONVERT TO 138KV OPERATION		
CONVERT TO 500KV OPERATION		
OTHER UTILITIES		
NON-UTILITY GENERATION		

STATIONS

1	LAVING	
2	STATE HILL	
3	WYOMISSING	
4	SHILLINGTON	
5	SPRING	
6	WERNERSVILLE	
7	HEIDELBERG	
8	COCALICO	
9	EAST ELIZABETHTOWN	
10	ELIZABETHTOWN	
11	DONEGAL	
12	MT. JOY	
13	SOUTH MANHEIM	
14	LITITZ	
15	WARWICK	
16	LINCOLN	
17	SOUTH AKRON	(96) (97
18	TERRE HILL	
19	MORGANTOWN	
20	NEFFSVILLE	
21	EAST PETERSBURG	
22	ROSEVILLE	
23	LEOLA	
24	WEST NEW HOLLAND	
25	EARL	
26	HONEYBROOK	
27	LANDISVILLE	
28	DONERVILLE	
29	DILLERVILLE	
30	EAST LANCASTER	
31	PRINCE	
32	NORTH COLUMBIA	
33	HEMPFIELD	
34	WEST HEMPFIELD	(96)
35	WEST LANCASTER	
36	MILLERSVILLE	
37	ENGLESIDE	
38	GREENLAND	
39	KINZER	
40	STRASBURG	
41	ATGLEN	
42	SAFE HARBOR	
43	MANOR	
44	MT. NEBO	
45	QUARRYVILLE	
46	BUCK	
47	HOLTWOOD	
48	FACE ROCK	
49	MUDDY RUN	
50	WAKEFIELD	
51	BERKS	
52	NORTH MANHEIM	
53	WEST WILLOW	
54	ROHRERSTOWN	
55	NORTH BRIDGEPORT	
56	PEACH BOTTOM	
57	BRUNNER ISLAND	
58	THREE MILE ISLAND	
59	RHEEMS	
60	CONESTOGA	
61	SILVER SPRING	
62	BRECKNOCK	
63	MARIETTA	
64	ROBESONIA	
65	NEW MORGAN	(98)
66	REAMSTOWN	
67	LETORT	
68	McGOVERNVILLE	(96)

DEVELOPMENT OF POWER SUPPLY
EXISTING AND PLANNED THRU 1999

LANCASTER DIVISION

PENNSYLVANIA POWER & LIGHT CO.
SYSTEM PLANNING DEPARTMENT

LD-3007

DOCUMENT
FOLDER

PENNSYLVANIA POWER & LIGHT COMPANY

Exhibit DAK 3-4
Adjustments to 1994-1995
Capital Construction Budget and
1995-1996 Capital Construction Budget and
Proposed Deactivation Dates For
Fossil and Hydro Generating Plants

Witness: Douglas A. Krall
Docket No. R-00943271

5/26/95 rdg

PENNSYLVANIA POWER & LIGHT COMPANY

EXHIBIT DAK 3

ADJUSTMENTS TO 1994-1995 CAPITAL CONSTRUCTION BUDGET

AND 1995-1996 CAPITAL CONSTRUCTION BUDGET

PENNSYLVANIA POWER & LIGHT COMPANY

TABLE OF CONTENTS

PENNSYLVANIA POWER & LIGHT COMPANY

SECTION 1

PURPOSE OF EXHIBIT

PURPOSE OF EXHIBIT

The purpose of this exhibit is to provide the details of adjustments made to projects included in the 1994-1995 and 1995-1996 Capital Construction Budgets to determine additions to and retirements from electric plant in the future test year.

PENNSYLVANIA POWER & LIGHT COMPANY

SECTION 2

DESCRIPTION OF BUDGET ADJUSTMENTS

DESCRIPTION OF BUDGET ADJUSTMENTS

The estimated 1994-1995 Capital Construction Budget, as presented in Exhibit DAK 1 and the 1995-1996 Capital Construction Budget as presented in Exhibit DAK 2 were prepared, and finalized during October of 1993 and 1994 respectively, to identify the capital requirements of the Company and to establish a basis for early identification of projects which facilitate an orderly process of engineering, construction and long-term system development. As such, the electric plant additions and retirements as shown on Table 2-5 (page 2-8), of Exhibit DAK 1 and DAK 2 are only estimates of those quantities developed prior to the end of each year in order to provide management with information for an orderly process of budget approval. The accuracy of these data is sufficient for the Company's budgeting process and for such items as calculating depreciation levels, early estimates of outside financing needs, work scheduling and manpower planning, and other management functions.

However, it was recognized that a more detailed estimate of electric plant additions and retirements was required as part of the process to develop data for a future test year in this rate case. Therefore, adjustments were required to reflect changes to those projects that were scheduled to be completed during the future test year. Adjustments to plant additions due to such changes are summarized by class of property and shown on the next page as Table I.

The adjustments made to each project identified for inclusion in the future test year period from the 1994-1995 Capital Construction Budget are shown as Section 3 (pages 4 through 11, and from the 1995-1996 Capital Construction Budget are shown as Section 4 (pages 12 through 18). In addition, pages 19 through 21 shown as Section 5, include projects that have been identified and added to the future test year after the two budgets were prepared.

These adjustments were made to reflect the following:

1. Exclusion of removal costs and salvage value.
2. Exclusion of portion of budgeted projects placed in-service prior to start of future test year.
3. Addition of projects scheduled to be completed prior to the future test year, but are now scheduled to be completed during the future test year.
4. Exclusion of portion of budgeted projects scheduled to be completed after the future test year.
5. Inclusion of revision to budget estimates approved since budget approval.
6. Addition of projects to the budget during the future test year period.

TABLE I
PENNSYLVANIA POWER & LIGHT COMPANY
SUMMARY OF ADJUSTMENTS MADE TO ESTIMATED
FUTURE TEST YEAR ELECTRIC PLANT ADDITIONS

(Thousands of Dollars)

Class of Property	Budget Estimate for Projects included in Future Test Year	Adjustments Made to Budget Estimates	Estimate of Future Test Year Additions
Production			
94-'95 Budget	234,926	115,215	119,711
95-96 Budget	168,754	26,783	141,971
Added to Budget		(6,072)	6,072
*Adjustment			1,346
Total Production			269,100
Transmission			
94-'95 Budget	20,045	15,998	4,047
95-96 Budget	18,621	6,521	12,100
Added to Budget		(362)	362
*Adjustment			(1,034)
Total Transmission			15,475
Distribution			
94-'95 Budget	140,851	94,857	45,994
95-96 Budget	155,518	42,453	113,065
Added to Budget		(4,272)	4,272
*Adjustment			1,456
Total Distribution			164,787
General			
94-'95 Budget	54,914	32,431	22,483
95-96 Budget	1,322	293	1,029
Added to Budget		(3,734)	3,734
*Adjustment			(1,768)
Total General			25,478
Grand Total	794,951	320,111	474,840

* The adjustment reflects some differences in the identification of projects in the budget and the specific plant assigned from the calculation of depreciation reserve.

Adjustments were also made to properly reflect the retirement estimates for projects identified in the future test year period. They are summarized by class of property and shown as Table II on page 22.

PENNSYLVANIA POWER & LIGHT COMPANY

SECTION 3

SUMMARY OF ADJUSTMENTS TO 1994-1995 CAPITAL CONSTRUCTION BUDGET TO ESTIMATE ELECTRIC PLANT ADDITIONS FOR FUTURE TEST YEAR

PENNSYLVANIA POWER & LIGHT COMPANY
ADJUSTMENTS TO 1994-1995 CONSTRUCTION BUDGET ESTIMATES
TO DERIVE FUTURE TEST YEAR ELECTRIC PLANT ADDITIONS

(1) Page Number	Budget Item Number	1994-1995 Budget Estimate	Future Test Year Estimate	Adjustment	REASONS FOR ADJUSTMENT				
					Exclude Removal Costs & Salvage Value	Part of Budget Item In Service	Project Carried Over From Previous Year	Part of Budget Item To Be Completed After Future Test Yr.	Budget Estimate Revised
1	344	4,245	4,229	16	X				
2	393	4,982	437	4,545		X			
	397	15,615	1,484	14,131		X			
	408	6,562	508	6,054	X	X			
3	438	4,960	73	4,887		X			
7	880	1,530	821	709	X	X		X	
	890	225	148	77	X	X		X	
	900	900	341	559	X	X		X	
	910	1,080	925	155	X	X		X	
9	1028	904	215	689		X			
	1102	2,000	843	1,157		X			
	1103	5,802	1,401	4,401		X			
	1104	2,000	594	1,406		X			
	1105	4,945	744	4,201		X			
	1111	295	67	228		X			
10	1122	899	91	808		X			
	1137	3,010	2,119	891	X				X
	1145	1,075	432	643					X
	1146	5,994	4,486	1,508	X				X
11	1151	389	377	12	X				X
	1157	1,191	94	1,097		X			
12	2105	448	302	146	X				X
14	2166	158	---	158	X				
	2167	158	---	158	X				
15	4023	100	275	(175)	X				X
	4024	1 625	102	1,523		X			
16	4095	410	399	11	X				X
	4135	9 401	1 114	8,287		X			
	4136	10,400	9,995	405	X				X

(1) Page numbers reference Exhibit DAK-1 Appendix - Section A 1994 List of Projects

PENNSYLVANIA POWER & LIGHT COMPANY
ADJUSTMENTS TO 1994-1995 CONSTRUCTION BUDGET ESTIMATES
TO DERIVE FUTURE TEST YEAR ELECTRIC PLANT ADDITIONS

(1) Page Number	Budget Item Number	1994-1995 Budget Estimate	Future Test Year Estimate	Adjustment	REASONS FOR ADJUSTMENT				
					Exclude Removal Costs & Salvage Value	Part of Budget Item In Service	Project Carried Over From Previous Year	Part of Budget Item To Be Completed After Future Test Yr.	Budget Estimate Revised
16	4139	14,935	1,992	12,943		X			X
	4140	16,898	16,645	253	X	X			X
	4155	2,595	2,575	20	X				
	4156	923	913	10	X				
	4158	3,410	3,656	(246)	X				X
17	4172	2,500	204	2,296		X			X
	4190	511	500	11	X				
	4192	6,598	6,598	---					
	4196	1,040	994	46	X				X
	4201	1,217	997	220	X				
	4204	210	54	156		X			
18	4212	1,260	978	282					X
	4218	585	558	27	X				X
	4219	944	362	582		X			X
	4221	1,389	1,344	45	X				
19	5021	2,786	964	1,822		X			
	5044	336	339	(3)					X
	5057	308	350	(42)					X
	5106	18,137	1,275	16,862		X			
20	5139	806	204	602		X			
	5153	425	471	(46)	X				X
21	5164	369	123	246		X			
	5168	3,264	5	3,259		X			
	5169	171	171	---					
	5173	933	30	903		X			X
	5174	1,700	173	1,527		X			X
22	6016	1,912	1,970	(58)	X				X
	6022	3,013	3,618	(605)					X
	6033	313	313	---					

(1) Page numbers reference Exhibit DAK-1 Appendix - Section A 1994 List of Projects

PENNSYLVANIA POWER & LIGHT COMPANY
ADJUSTMENTS TO 1994-1995 CONSTRUCTION BUDGET ESTIMATES
TO DERIVE FUTURE TEST YEAR ELECTRIC PLANT ADDITIONS

(1) Page Number	Budget Item Number	1994-1995 Budget Estimate	Future Test Year Estimate	Adjustment	REASONS FOR ADJUSTMENT				
					Exclude Removal Costs & Salvage Value	Part of Budget Item In Service	Project Carried Over From Previous Year	Part of Budget Item To Be Completed After Future Test Yr.	Budget Estimate Revised
22	6036	346	329	17	X				
23	6120	2,066	2,099	(33)	X				X
	7012	377	163	214	X				X
	7022	655	458	197	X				X
	7510	3,960	623	3,337	X	X			X
	7750	1,866	2,723	(857)	X	X			X
	7752	36,750	31,950	4,800					X
	7910	2,415	10	2,405	X	X			
	7960	3,000	100	2,900	X	X			
24	7980	2,000	117	1,883	X	X			
	7990	700	147	553	X	X			
25	8009	2,648	147	2,501		X			X
	8039	9,000	85	8,915		X			
26	8042	4,235	120	4,115		X			
	8080	3,862	3,623	239	X				X
27	9970	300	72	228		X			
29	10014	1,218	796	422	X				X
30	10407	181	164	17	X				
	10502	177	156	21	X				X
	12009	423	190	233	X				X
31	19204	388	492	(104)	X				X
33	20717	160	80	80					X
	22004	662	578	84	X				X
	22006	539	428	111	X				X
	22007	310	265	45	X				X
	22114	137	46	91	X	X			X
34	24415	413	305	108	X				
	24422	2,035	10	2,025		X			
	24434	220	79	141	X	X			

(1) Page numbers reference Exhibit DAK-1 Appendix - Section A 1994 List of Projects

PENNSYLVANIA POWER & LIGHT COMPANY
ADJUSTMENTS TO 1994-1995 CONSTRUCTION BUDGET ESTIMATES
TO DERIVE FUTURE TEST YEAR ELECTRIC PLANT ADDITIONS

(1) Page Number	Budget Item Number	1994-1995 Budget Estimate	Future Test Year Estimate	Adjustment	REASONS FOR ADJUSTMENT				
					Exclude Removal Costs & Salvage Value	Part of Budget Item In Service	Project Carried Over From Previous Year	Part of Budget Item To Be Completed After Future Test Yr.	Budget Estimate Revised
36	31218	78	72	6	X				
37	33204	360	418	(58)	X				X
38	40079	1,162	714	448	X				X
	40312	339	358	(19)	X				X
	40515	526	384	142	X				X
	40516	370	262	108	X				X
39	40517	136	134	2	X				X
	40518	194	164	30	X				X
	40601	1,428	1,235	193		X			X
41	50047	338	386	(48)	X				X
42	50057	1,191	1,089	102	X				X
	50201	689	709	(20)	X				X
	51213	177	193	(16)	X				X
	51305	122	134	(12)	X				X
43	51718	98	86	12	X				X
44	53911	137	135	2	X				X
	55309	272	257	15	X				X
45	56510	54	59	(5)	X				X
	57818	44	61	(17)	X				X
	57819	142	109	33	X				X
47	60076	1,632	1,104	528	X				X
	60084	2,346	2,134	212	X				
48	63219	333	283	50	X				X
	66712	113	71	42	X				X
49	66811	487	487	—					
50	68808	81	67	14	X				X
	69819	382	370	12	X				X
51	70013	2,527	267	2,260	X	X			
	70018	2,451	35	2,416		X			X

(1) Page numbers reference Exhibit DAK-1 Appendix - Section A 1994 List of Projects

PENNSYLVANIA POWER & LIGHT COMPANY
ADJUSTMENTS TO 1994-1995 CONSTRUCTION BUDGET ESTIMATES
TO DERIVE FUTURE TEST YEAR ELECTRIC PLANT ADDITIONS

(1) Page Number	Budget Item Number	1994-1995 Budget Estimate	Future Test Year Estimate	Adjustment	REASONS FOR ADJUSTMENT				
					Exclude Removal Costs & Salvage Value	Part of Budget Item In Service	Project Carried Over From Previous Year	Part of Budget Item To Be Completed After Future Test Yr.	Budget Estimate Revised
52	70040	114	114	—					
	70041	690	381	309	X				X
53	73907	211	166	45	X				X
54	75413	202	193	9	X				X
56	81101	679	244	435	X	X		X	
	81102	500	112	388	X	X		X	X
	81103	900	202	698	X	X		X	
	81104	828	176	652	X	X		X	
	81106	50	12	38		X		X	
	81107	377	225	152		X			X
	81109	450	515	(65)			X		X
	81111	100	25	75				X	
	81113	185	104	81		X			
57	81115	1,026	257	769		X		X	
	81119	450	131	319	X	X			
	81120	500	110	390	X	X			
58	80001	4,300	924	3,376	X	X		X	
	80002	160	37	123	X	X			X
	80004	800	350	450	X	X		X	X
	80009	325	98	227		X			X
	80013	424	390	34					X
	80015	25	6	19		X			X
	80016	100	24	76	X	X			
	80017	3,800	2,044	1,756	X	X			X
	80019	500	299	201	X	X			X
59	81001	3,500	665	2,835	X	X			
	81002	805	219	586	X	X			
	81003	1,600	716	884	X	X			
	81004	4,855	1,072	3,783	X	X			

(1) Page numbers reference Exhibit DAK-1 Appendix - Section A 1994 List of Projects

PENNSYLVANIA POWER & LIGHT COMPANY
ADJUSTMENTS TO 1994-1995 CONSTRUCTION BUDGET ESTIMATES
TO DERIVE FUTURE TEST YEAR ELECTRIC PLANT ADDITIONS

(1) Page Number	Budget Item Number	1994-1995 Budget Estimate	Future Test Year Estimate	Adjustment	REASONS FOR ADJUSTMENT				
					Exclude Removal Costs & Salvage Value	Part of Budget Item In Service	Project Carried Over From Previous Year	Part of Budget Item To Be Completed After Future Test Yr.	Budget Estimate Revised
59	81005	285	64	221	X	X			
	81006	2,600	591	2,009	X	X			X
	81008	910	205	705	X	X			X
	81009	1,020	239	781	X	X			X
	81011	970	214	756	X	X			X
61	82001	1,500	364	1,136	X	X			X
	82002	11,100	2,767	8,333	X	X			X
	82003	46,000	11,130	34,870	X	X			X
	83001	2,500	587	1,913	X	X			X
	83002	500	117	383	X	X			X
	83003	14,000	3,302	10,698	X	X			X
	83004	4,400	966	3,434	X	X			X
63	85099	37,912	16,990	20,922		X			X
	87001	4,789	3,258	1,531	X	X			
64	86001	140	35	105		X			X
	86003	575	129	446	X	X			X
	86005	9,320	480	8,840		X			X
	86006	500	1,156	(656)		X			X
	86007	963	142	821	X	X			X
	87002	1,433	358	1,075		X			
	87003	790	198	592		X			
	87004	30	8	22		X			

(1) Page numbers reference Exhibit DAK-1 Appendix - Section A 1994 List of Projects

PENNSYLVANIA POWER & LIGHT COMPANY
ADJUSTMENTS TO 1994-1995 CONSTRUCTION BUDGET ESTIMATES
TO DERIVE FUTURE TEST YEAR ELECTRIC PLANT ADDITIONS

(1) Page Number	Budget Item Number	1994-1995 Budget Estimate	Future Test Year Estimate	Adjustment	REASONS FOR ADJUSTMENT				
					Exclude Removal Costs & Salvage Value	Part of Budget Item In Service	Project Carried Over From Previous Year	Part of Budget Item To Be Completed After Future Test Yr.	Budget Estimate Revised
Grand Total:		450,736	192,235	258,501					

(1) Page numbers reference Exhibit DAK-1 Appendix - Section A 1994 List of Projects

PENNSYLVANIA POWER & LIGHT COMPANY

SECTION 4

SUMMARY OF ADJUSTMENTS TO 1995-1996 CAPITAL CONSTRUCTION BUDGET TO ESTIMATE ELECTRIC PLANT ADDITIONS FOR FUTURE TEST YEAR

PENNSYLVANIA POWER & LIGHT COMPANY
ADJUSTMENTS TO 1995-1996 CONSTRUCTION BUDGET ESTIMATES
TO DERIVE FUTURE TEST YEAR ELECTRIC PLANT ADDITIONS

(1) Page Number	Budget Item Number	1995-1996 Budget Estimate	Future Test Year Estimate	Adjustment	REASONS FOR ADJUSTMENT				
					Exclude Removal Costs & Salvage Value	Part of Budget Item In Service	Project Carried Over From Previous Year	Part of Budget Item To Be Completed After Future Test Yr.	Budget Estimate Revised
1	369	5,822	5,757	65	X				
	379	13,400	13,400	—					
	402	1,700	1,700	—					
	406	5,399	5,318	81	X				
	435	35	35	—					
2	463	1,261	1,358	(97)	X				X
3	479	275	275	—					
	482	2,851	2,848	3					X
	499	190	190	—					
	501	1,159	1,159	—					
4	502	1,530	1,530	—					
	519	325	325	—					
5	531	915	1,000	(85)					X
	534	921	921	—					
	535	400	400	—					
6	539	970	969	1					X
	880	1,511	252	1,259				X	
7	1138	2,157	2,143	14	X				
	1152	398	393	5	X				
	2025	12,425	12,147	278	X				
8	2062	2,372	2,203	169	X				
	2066	576	573	3	X				
	2067	901	898	3	X				
	2090	5,307	4,737	570	X				
	2127	1,727	1,650	77	X				
	2128	3,141	3,141	—					
	2148	2,400	2,400	—					
9	2149	489	489	—					
	2171	266	266	—					

(1) Page numbers reference Exhibit DAK-2 Appendix - Section A 1995 List of Projects

PENNSYLVANIA POWER & LIGHT COMPANY
ADJUSTMENTS TO 1995-1996 CONSTRUCTION BUDGET ESTIMATES
TO DERIVE FUTURE TEST YEAR ELECTRIC PLANT ADDITIONS

(1) Page Number	Budget Item Number	1995-1996 Budget Estimate	Future Test Year Estimate	Adjustment	REASONS FOR ADJUSTMENT				
					Exclude Removal Costs & Salvage Value	Part of Budget Item In Service	Project Carried Over From Previous Year	Part of Budget Item To Be Completed After Future Test Yr.	Budget Estimate Revised
9	2673	2,579	2,584	(5)	X				
10	4164	26,061	26,061	—					
	4187	3,977	3,823	154	X				
	4188	300	300	---					
11	5019	1,850	1,827	23	X				
	5084	6,946	6,738	208	X				X
	5103	17,100	16,100	1,000	X				
12	5119	481	455	26	X				
	5149	1,196	1,324	(128)	X				
	5163	233	231	2	X				
	5167	3,354	2,975	379	X				
	5171	372	371	1	X				
13	6005	16,084	5,284	10,800		X			
	7510	4,099	2,131	1,968	X			X	
	7511	7,035	1,938	5,097	X	X			
	7750	2,336	849	1,487	X			X	
	7910	1,428	355	1,073	X			X	
14	7960	1,000	72	928	X			X	
	7980	1,500	76	1,424	X			X	
15	8025	500	251	249	X				X
	8034	6,700	7,149	(449)	X				X
	8036	8,180	1,616	6,564	X			X	
	8037	628	623	5	X				
	8048	400	400	---					
16	9005	1,913	1,874	39	X				
	9970	300	187	113	X			X	
17	10017	210	210	---					
18	10094	448	448	---					
19	12010	180	155	25	X				

(1) Page numbers reference Exhibit DAK-2 Appendix - Section A 1995 List of Projects

PENNSYLVANIA POWER & LIGHT COMPANY
ADJUSTMENTS TO 1995-1996 CONSTRUCTION BUDGET ESTIMATES
TO DERIVE FUTURE TEST YEAR ELECTRIC PLANT ADDITIONS

(1) Page Number	Budget Item Number	1995-1996 Budget Estimate	Future Test Year Estimate	Adjustment	REASONS FOR ADJUSTMENT				
					Exclude Removal Costs & Salvage Value	Part of Budget Item In Service	Project Carried Over From Previous Year	Part of Budget Item To Be Completed After Future Test Yr.	Budget Estimate Revised
20	15814	402	386	16	X				
21	20030	1,512	1,514	(2)	X	X			
22	20715	150	134	16	X				
	21504	612	719	(107)	X				X
	21714	104	92	12	X				
	22008	507	420	87	X				
	24120	469	342	127	X				
23	24435	212	146	66	X				
24	32507	113	100	13	X				
	32807	51	50	1	X				
25	33701	1,568	82	1,486				X	
	34810	139	135	4	X				
26	40086	2,405	2,338	67	X				
	40096	291	283	8	X				
	40520	283	255	28	X				
27	41105	147	147	—					
	42001	1,695	1,694	1					X
	42205	119	106	13	X				
	43101	124	124	—					
29	50017	3,470	3,310	160	X				X
	50044	1,668	1,587	81	X				X
	50045	11,600	3,086	8,514				X	
	50050	3,587	5,699	(2,112)					
	50052	511	479	32	X				
30	50607	92	87	5	X				
31	51724	403	397	6	X				X
	52408	173	155	18	X				
32	54703	644	636	8	X				
	56309	370	350	20	X				

(1) Page numbers reference Exhibit DAK-2 Appendix - Section A 1995 List of Projects

PENNSYLVANIA POWER & LIGHT COMPANY
ADJUSTMENTS TO 1995-1996 CONSTRUCTION BUDGET ESTIMATES
TO DERIVE FUTURE TEST YEAR ELECTRIC PLANT ADDITIONS

(1) Page Number	Budget Item Number	1995-1996 Budget Estimate	Future Test Year Estimate	Adjustment	REASONS FOR ADJUSTMENT				
					Exclude Removal Costs & Salvage Value	Part of Budget Item In Service	Project Carried Over From Previous Year	Part of Budget Item To Be Completed After Future Test Yr.	Budget Estimate Revised
32	56509	80	72	8	X				
33	56609	67	61	6	X				
	57901	1,044	1,045	(1)	X				X
	58314	39	36	3	X				
34	60069	6,143	1,632	4,511				X	
	60502	704	713	(9)	X				X
35	62008	165	165	—					
	62009	323	299	24	X				X
	66508	329	320	9	X				
	66715	487	489	(2)	X				
36	66722	227	227	—					
	66723	120	120	—					
	66724	55	55	—					
	66725	120	120	—					
37	69818	634	680	(46)	X				X
38	70034	1,732	1,086	646	X	X			
39	72603	333	302	31	X				
	73308	95	87	8	X				
40	73310	359	340	19	X				
	73511	164	147	17	X				
41	77212	196	161	35	X				X
	77213	342	294	48	X				
	77214	183	140	43	X				
	77217	380	321	59	X				
	77218	166	142	24	X				X
	77222	42	41	1	X				
42	79611	157	132	25	X				
43	81101	129	589	(460)			X		X
	81102	766	181	585	X			X	

(1) Page numbers reference Exhibit DAK-2 Appendix - Section A 1995 List of Projects

PENNSYLVANIA POWER & LIGHT COMPANY
ADJUSTMENTS TO 1995-1996 CONSTRUCTION BUDGET ESTIMATES
TO DERIVE FUTURE TEST YEAR ELECTRIC PLANT ADDITIONS

(1) Page Number	Budget Item Number	1995-1996 Budget Estimate	Future Test Year Estimate	Adjustment	REASONS FOR ADJUSTMENT				
					Exclude Removal Costs & Salvage Value	Part of Budget Item In Service	Project Carried Over From Previous Year	Part of Budget Item To Be Completed After Future Test Yr.	Budget Estimate Revised
43	81103	400	270	130	X			X	
	81104	800	510	290	X			X	
	81106	25	19	6				X	
	81111	50	38	12				X	
	81113	171	232	(61)	X		X		
	81115	130	98	32				X	
	81120	300	198	102	X			X	
44	80001	4,000	2,580	1,420	X			X	
	80002	150	104	46	X			X	
	80004	775	100	675				X	
	80013	210	1,200	(990)			X		X
	80015	25	19	6				X	
	80016	80	58	22	X			X	
	80018	83	93	(10)					X
	80019	506	258	248	X			X	
45	81001	3,900	2,223	1,677	X			X	
	81002	750	614	136	X			X	
	81003	1,400	1,880	(480)	X			X	
	81004	4,900	3,247	1,653	X			X	
	81005	260	175	85	X			X	
	81006	2,700	1,840	860	X			X	
	81008	810	547	263	X			X	
	81009	1,020	709	311	X			X	
	81011	920	607	313	X			X	
47	82001	1,200	873	327	X			X	
	82002	11,300	8,301	2,999	X			X	
	82003	46,000	33,390	12,610	X			X	
	83001	3,000	2,467	533	X			X	
	83003	14,000	9,905	4,095	X			X	

(1) Page numbers reference Exhibit DAK-2 Appendix - Section A 1995 List of Projects

PENNSYLVANIA POWER & LIGHT COMPANY
ADJUSTMENTS TO 1995-1996 CONSTRUCTION BUDGET ESTIMATES
TO DERIVE FUTURE TEST YEAR ELECTRIC PLANT ADDITIONS

(1) Page Number	Budget Item Number	1995-1996 Budget Estimate	Future Test Year Estimate	Adjustment	REASONS FOR ADJUSTMENT				
					Exclude Removal Costs & Salvage Value	Part of Budget Item In Service	Project Carried Over From Previous Year	Part of Budget Item To Be Completed After Future Test Yr.	Budget Estimate Revised
47	83004	4,500	3,105	1,395	X			X	
50	86001	85	64	21				X	
	86003	619	1,233	(614)	X		X		X
	86007	694	509	185	X			X	
	87002	460	345	115				X	
	87003	550	413	137				X	
	87004	27	20	7				X	
	87007	200	187	13	X				

(1) Page numbers reference Exhibit DAK-2 Appendix - Section A 1995 List of Projects

PENNSYLVANIA POWER & LIGHT COMPANY
ADJUSTMENTS TO 1995-1996 CONSTRUCTION BUDGET ESTIMATES
TO DERIVE FUTURE TEST YEAR ELECTRIC PLANT ADDITIONS

(1) Page Number	Budget Item Number	1995-1996 Budget Estimate	Future Test Year Estimate	Adjustment	REASONS FOR ADJUSTMENT: Exclude Removal Costs & Salvage Value	Part of Budget Item In Service	Project Carried Over From Previous Year	Part of Budget Item To Be Completed After Future Test Yr.	Budget Estimate Revised
Grand Total:		344,215	268,165	76,050					

(1) Page numbers reference Exhibit DAK-2 Appendix - Section A 1995 List of Projects

PENNSYLVANIA POWER & LIGHT COMPANY

SECTION 5

SUMMARY OF ADJUSTMENTS TO PROJECTS ADDED TO BUDGETS TO ESTIMATE ELECTRIC PLANT ADDITIONS FOR FUTURE TEST YEAR

PENNSYLVANIA POWER & LIGHT COMPANY
ADJUSTMENTS TO 1994-1995 & 1995-1996 CONSTRUCTION BUDGET ESTIMATES
TO DERIVE FUTURE TEST YEAR ELECTRIC PLANT ADDITIONS

Budget Item Number	1994-1995 & 1995-1996 Budget Estimates	Future Test Year Estimate	Adjustment	REASONS FOR ADJUSTMENT			
				Exclude Removal Costs & Salvage Value	Part of Budget Item In Service	Project Carried Over From Previous Year	Project Added to Budget
394	—	420	(420)		X	X	
405	---	633	(633)			X	
521	---	204	(204)				
523	---	596	(596)	X			
890	---	806	(806)				
1162	---	346	(346)	X			
3038	---	53	(53)				
4228	---	161	(161)				
4229	---	109	(109)				
4230	---	270	(270)				
4232	---	83	(83)	X			
4233	—	329	(329)		X		
4237	—	138	(138)				
5178	---	15	(15)		X		
6039	---	86	(86)			X	
7016	—	174	(174)	X			
7023	—	189	(189)	X	X		
7751	---	1,460	(1,460)		X		
8023	---	187	(187)	X			
8051	---	175	(175)				
10016	—	180	(180)	X			
10093	—	369	(369)	X			
24421	---	310	(310)	X		X	
24437	---	75	(75)	X		X	
24438	---	36	(36)	X			
33606	---	42	(42)				
40202	---	160	(160)	X	X	X	
41203	---	580	(580)	X		X	
42604	---	72	(72)	X	X		

PENNSYLVANIA POWER & LIGHT COMPANY
ADJUSTMENTS TO 1994-1995 & 1995-1996 CONSTRUCTION BUDGET ESTIMATES
TO DERIVE FUTURE TEST YEAR ELECTRIC PLANT ADDITIONS

Budget Item Number	1994-1995 & 1995-1996 Budget Estimates	Future Test Year Estimate	Adjustment	REASONS FOR ADJUSTMENT			
				Exclude Removal Costs & Salvage Value	Part of Budget Item In Service	Project Carried Over From Previous Year	Project Added to Budget
50024	---	645	(645)		X	X	
52709	---	135	(135)	X			
63001	---	94	(94)	X		X	
64011	---	340	(340)	X	X	X	
66713	---	83	(83)	X			
67020	---	38	(38)			X	
67023	---	233	(233)	X		X	
69811	---	405	(405)	X			
78109	---	142	(142)	X		X	
80007	---	333	(333)				
86008	---	3,734	(3,734)		X	X	

PENNSYLVANIA POWER & LIGHT COMPANY
ADJUSTMENTS TO 1994-1995 & 1995-1996 CONSTRUCTION BUDGET ESTIMATES
TO DERIVE FUTURE TEST YEAR ELECTRIC PLANT ADDITIONS

	Budget Item Number	1994-1995 & 1995-1996 Budget Estimates	Future Test Year Estimate	Adjustment	REASONS FOR ADJUSTMENT			
					Exclude Removal Costs & Salvage Value	Part of Budget Item In Service	Project Carried Over From Previous Year	Project Added to Budget
Grand Total:		---	14,440	(14,440)				

PENNSYLVANIA POWER & LIGHT COMPANY

SECTION 6

SUMMARY OF ADJUSTMENTS TO 1994-1995 CAPITAL CONSTRUCTION BUDGET RETIREMENT ESTIMATES FOR FUTURE TEST YEAR

TABLE II
PENNSYLVANIA POWER & LIGHT COMPANY
SUMMARY OF ADJUSTMENTS MADE TO ESTIMATED
FUTURE TEST YEAR ELECTRIC PLANT RETIREMENTS

(Thousands of Dollars)

Class of Property	Estimate for each Budget Year	Adjustments Made to Budget Estimates	Estimate of Future Test Year Retirements
Production			
94-'95 Budget	20,530	9,331	11,199
95-96 Budget	14,735	3,703	11,032
Added to Budget		946	946
*Adjustment			
Total Production			23,177
Transmission			
94-'95 Budget	1,120	1,120	-
95-96 Budget	1,790	1,780	10
Added to Budget		-	-
*Adjustment			1
Total Transmission			11
Distribution			
94-'95 Budget	18,030	14,294	3,736
95-96 Budget	19,160	9,672	9,488
Added to Budget		96	96
*Adjustment			69
Total Distribution			13,389
General			
94-'95 Budget	330	281	49
95-96 Budget	330	256	74
Added to Budget		-	-
*Adjustment			(70)
Total General			53
Grand Total	76,025	41,479	36,630

* The adjustment reflects some differences in the identification of projects in the budget and the specific plant assigned from the calculation of depreciation reserve.

PENNSYLVANIA POWER & LIGHT COMPANY

EXHIBIT DAK 4

PROPOSED DEACTIVATION DATES FOR

FOSSIL AND HYDRO GENERATING PLANTS

Exhibit DAK 4

PROPOSED DEACTIVATION DATES FOR FOSSIL AND HYDRO GENERATING PLANTS

	Current Dates	Revised Dates
Steam Electric Stations		
Holtwood 17	2009	2003
Martins Creek 1&2	2015	2003
Sunbury 1, 2, 3&4	2010	2003
Brunner Island 1, 2&3	2014	2014 (no change)
Montour 1&2	2017	2017 (no change)
Martins Creek 3&4	2010	2010 (no change)
Keystone/Conemaugh	2002/2005	2007/2010
Combustion Turbines		
Allentown	2002	2002 (no change)
Harrisburg	2002	2002 (no change)
Harwood	2002	2002 (no change)
Jenkins	2002	2002 (no change)
Williamsport	2002	2002 (no change)
Fishbach	2004	2004 (no change)
Lock Haven	2004	2004 (no change)
West Shore	2004	2004 (no change)
Martins Creek	2015	2010
Sunbury	2010	2003
Diesels		
Brunner Island	2014	2014 (no change)
Martins Creek	2015	2010
Sunbury	2010	2003
Keystone/Conemaugh	2002/2005	2007/2010
Hydro Electric Stations		
Wallenpaupack	NA	2034
Holtwood	NA	2044