RP - H.16.

ATTACHMENT 1

PENNSYLVANIA POWER & LIGHT COMPANY

Comparative Financial Data

		1996	
a.	Times interest earned ratio - pre-tax basis	3.62	
	Times interest earned ratio - post-tax basis	2.53	
b.	Preferred stock dividend coverage ratio - post-tax basis	2.46	
c.	Times fixed charges earned ratio - pre-tax basis	3.50	
d.	Earnings per share [(a)]	$2.05	
e.	Dividend per share [(a)]	$1.67	
f.	Average dividend yield (52 week high/low common stock price) [(a)]	7.01	%
g.	Average book value per share [(a)]	$16.04	
h.	Average market price per share [(a)]	$23.34	
i.	Market price-book value ratio [(a)]	1.46	
j.	Earnings-book value ratio (per share basis, average book value) [(a)]	0.128	
k.	Dividend payout ratio [(a)]	0.815	
l.	AFUDC as a % of earnings available for common equity	3.60	%
m.	Construction work in progress as a % of net utility plant	2.44	%
n.	Effective income tax rate	41.5	%
o.	Internal cash generation as a % of total capital requirements [(b)]	177.11	%

(a) Data provided is based on information of PP&L Resources, Inc., PP&L's parent company.

(b) Excludes nuclear fuel payments because the Company has a nuclear fuel trust that provides all the financing for nuclear fuel.

RP - I.1.
J. M. Kleha
R. M. Geneczko

Q. Provide a cost study which allocates the total cost-of-service to reflect the proposed restructuring of the company. The total cost of service should be allocated among generation, transmission, distribution and joint and common costs for each customer class. Generation costs should be further allocated among the customer classes by fuel type. Include an explanation of how the cost allocation methodology selected maintains consistency with the allocation methodology for utility production plant accepted by the Commission in the company's most recent base rate proceeding. This study should include a statement of the source and age of the load data used in the determination of demand responsibilities, a description of any special studies used to prepare the cost study, and the most recent overall system line loss study. The cost data used in the allocation study may be based on the base year.

A. See Exhibit JMK1 which is a full-allocated cost-of-service study for the 12 months ended September 30, 1995. This exhibit represents PP&L's compliance with the results of the Commission's Final Order in the Company's most recent base rate proceeding at Docket No. R-00943271. Load data utilized in the study was that forecasted for the year ended September 30, 1995, which was based on actual results of operations for the year ended September 30, 1994. Exhibit JMK2 is a cost allocation study which "unbundles" the results of Exhibit JMK1 into the functional components of generation, transmission and distribution. Attachment 1 provides the overall system line loss study used to allocate energy losses to the various customer classes.

RP-I.1.
Attachment 1

ANALYSIS OF PP&L LOSSES
POST-SUSQUEHANNA SYSTEM

JANUARY, 1984

SPR-234

ANALYSIS OF PP&L LOSSES
POST-SUSQUEHANNA SYSTEM

PENNSYLVANIA POWER & LIGHT COMPANY
SYSTEM PLANNING DEPARTMENT
JANUARY, 1984

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R. F. Schmoyer
Manager-Electrical Planning

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Thomas Castellane

SPR-234

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INTRODUCTION

This report reviews the magnitude of electrical losses on the PP&L System and their allocation to customers supplied at the secondary, primary, and transmission voltage levels based on expected 1985 system conditions with both Susquehanna generators in service. A previous analysis, based on actual 1976 conditions, is described in report, SPR 190, dated January 1980.

PP&L uses a simple straightforward method to allocate losses in its cost of service analyses. This method is based on studies which indicated that 1 kWh supplied at secondary voltage produces three times the losses as 1 kWh supplied at transmission voltage and that 1 kWh supplied at primary voltage produces two times the losses as 1 kWh supplied at transmission voltage. Total system losses are allocated among customers supplied at secondary, primary, and transmission voltage in proportion to annual energy sales after weighting secondary, primary, and transmission sales by factors of 3-2-1 respectively. Use of these weighting factors greatly simplifies the allocation of system losses, which are defined as the difference between annual net output and sales (including company use) as reported on FERC Form-1. Use of the weighting factors eliminates the need to repeatedly calculate the losses on the various operating levels of the system.

An investigation of PP&L losses, based on actual data for 1976, indicated that use of the 3-2-1 weighting factors provides fair and equitable allocation of system losses. At that time, it was recognized that the future addition of large base-load generation at Susquehanna (2100 MW) might significantly increase 500 kV, 230 kV, and unit transformer losses and would require a review of the weighting factors used to allocate losses. This possibility was indicated because the 1976 study disclosed that bulk power transmission losses are primarily a function of the level of generation. Consequently, the current study was initiated to evaluate the post-Susquehanna system.

The analysis of loss allocation is aided by separating the losses into two categories -- those that occur on production facilities and those that occur on supply facilities. Production facilities consist of all the equipment used for the generation and bulk power transmission of electrical energy. These facilities include three operating levels, 500 kV transmission, 230 kV transmission, and the generators' unit step-up transformers. Losses on the production facilities are primarily a function of the level of generation. Because they will be directly impacted by the increased level of generation, production facility losses have been re-evaluated.

Supply facilities consist of all the equipment used to distribute electrical energy to the ultimate customers. The supply facilities also include three operating levels, 138/69 kV transmission, primary distribution, and secondary. Losses on the supply facilities are principally a function of load. Since no significant changes in design or operation of the supply facilities have been

made since 1976, losses on these facilities will remain the same percentages of net output as found in the 1976 study. Consequently, they have not been re-evaluated.

SCOPE

This study (1) determines the projected production facility losses on the post-Susquehanna system, and, (2) determines whether the 3-2-1 weighting factors continue to be appropriate for allocating losses.

PROCEDURE

The study was based on projected 1985 conditions. Losses on the production facilities were calculated by an AC load flow computer program. Thirty-six cases were used to represent typical PP&L and PJM conditions expected throughout 1985. Weighted averages of weekday, weekend, and light load losses were used to determine the total energy losses for the year. Losses on the supply facilities were represented as the same percentages of annual net output as calculated in the 1976 study.

The appropriateness of the 3-2-1 weighting factors for post-Susquehanna conditions was then investigated by comparing the allocation of annual energy losses by using the 3-2-1 factors with allocation directly from each operating level.

R E S U L T S

1. Post-Susquehanna (1985) annual energy losses at each operating level are projected in Table I. The calculated values from the 1976 study are also provided for comparison.

TABLE I
ANNUAL ENERGY LOSSES AT EACH OPERATING LEVEL

	1985 (Projected)			1976 (Actual)		
Operating Level	Losses (GWH)	% Total Losses	% Net[1] Output	Losses (GWH)	% Total Losses	% Net Output
500 kV	173	7	0.7	44[4]	2	0.2
230 kV	414	18	1.6	273	15	1.2
Unit Transfs	109	5	0.4	91	5	0.4
Subtotal-Production	696	30	2.7	408	22	1.8
69/138 kV	460	20	1.8[3]	402	22	1.8
Primary	615	26	2.4[3]	540	30	2.4
Secondary	549	24	2.1[3]	479	26	2.1
Subtotal-Supply	1624	70	6.3[3]	1421	78	6.3
System Total	2320	100	9.0	1829[2]	100	8.1[2]

(1) Based on 25,560 GWH without UGI. 9/83 Forecast.
(2) Calculated value. Actual losses were 1,888 GWH equivalent to 8.5% of net output.
(3) These percentages found in the 1976 study were used for 1985 since there have been no significant changes in design or operation of the supply facilities.
(4) Revised from 39 GWH.

2. Changes in generation, exports, net output, and losses from 1976 to 1985 are shown in Table II. Quantities are shown as gigawatthours and percentages of generation.

TABLE II
COMPARISON OF GENERATION AND LOSSES
FOR 1985 AND 1976

	1985 (Projected)		1976 (Actual)	
	GWH	% GEN	GWH	% GEN
Generation & Purchases	40,480[1]	100	28,926	100
Net Exports	14,920[2]	37	6,611	23
Net Output	25,560[3]	63	22,315	77
System Losses				
Production	696	1.7	408	1.4
Supply	1,624	4.0	1,421	4.9
Total	2,320	5.7	1,829[4]	6.3

(1) Includes 100% of Susquehanna output and PP&L share of Safe Harbor output.
(2) Includes net Allegheny Electric share of Susquehanna, sales to Atlantic City Electric, and sales to UGI.
(3) Without UGI.
(4) Calculated value. Actual losses were 1,888 GWH equivalent to 6.5% of generation and purchases.

3. Direct Allocation of 1985 losses from each operating level to the secondary, primary, and transmission customer voltage levels is compared with allocation by means of the 3-2-1 weighting factors in Table III.

TABLE III
COMPARISON OF ALLOCATED LOSSES

Cust. Volt. Level	Losses (GWH)		% Total Losses		% Net Output	
	Direct	3-2-1	Direct	3-2-1	Direct	3-2-1
Trans.	252	209	11	9	1	1
Primary	278	274	12	12	1	1
Second.	1790	1837	77	79	7	7
Total	2320	2320	100	100	9	9

C O N C L U S I O N S

1. Annual energy losses at the production level are expected to be higher for the post-Susquehanna system because of the substantial increase in PP&L's generation.

2. The increase in losses at the production level is due to the increased amount of projected PP&L generation that will be exported.

3. The increase in losses at the production level will increase PP&L's total losses as a percentage of net output.

4. However, PP&L's total losses will decrease as a percentage of PP&L's total generation.

5. The increased losses will have only an insignificant effect on the allocation of losses among customers supplied at the secondary, primary, and transmission voltage levels.

6. Use of the 3-2-1 weighting factors will continue to provide a fair allocation of system losses.

D I S C U S S I O N

I. Background

System losses are defined, in accordance with FERC Form 1, as the difference between annual net output and annual sales. Company use is included in sales. Pennsylvania Power and Light Company's annual energy losses, as calculated by this definition, range between 6 percent and 9 percent of annual net output.

The costs associated with system losses must be allocated equitably among the customer classes. PP&L allocates system losses among the customer classes in proportion to their annual energy sales. This method of allocation recognizes that more losses are incurred in supplying a kilowatt-hour at a lower voltage than at a higher voltage. Sales at the secondary, primary, and transmission voltage levels are multiplied by weighting factors to determine what percentage of losses should be allocated to customers at each of these voltage levels. The weighting factors are 3-2-1 for the secondary, primary, and transmission voltage levels, respectively. These weighting factors are the result of studies which indicate that 1 kWh sold at the secondary voltage level produces three times the losses as 1 kWh sold at the transmission voltage level and 1 kWh sold at the primary voltage level produces twice the losses as 1 kWh sold at the transmission voltage level. After losses have been allocated to these three voltage levels, they can be added to the respective sales at each voltage level to determine the total contribution of each voltage level to the system peak. Loss factors can then be calculated for use in determining each customer class's contribution to the system peak.

An analysis of losses occurring on the PP&L system in 1976 verified that use of the 3-2-1 weighting factors provides an equitable allocation of losses. Losses occurring at each operating level of the system were calculated from actual historical data for 1976 conditions. System Operator's logs provided the basis for determining 500 kV, 230 kV, unit transformer, and 69 kV losses. PP&L's share of 500 kV losses was directly available from the logs. The logs also contained sufficient generation, load, and tie line data to represent the peak hour and a light load hour for each month in the computer AC load flow program. These cases were used to calculate 230 kV, unit transformer, 69 kV, and 69-12 kV transformer losses. A sample of primary distribution circuits was used to determine distribution circuit losses as an average percentage of distribution system load. Transformer utilization data was used to calculate secondary losses, most of which occur in the distribution transformers. This calculation agreed within 3 percent with 1976 system losses as defined by FERC Form 1. Use of the 3-2-1 weighting factors provided an allocation of losses in the same proportion as allocation directly from each operating level of the System, 500 kV to secondary. This result supported the continued use of the 3-2-1 weighting factors to provide an equitable allocation of losses.

Because the addition of a large increment of generation might significantly impact 500 kV, 230 kV, and unit transformer losses, the need to review the distribution of system losses after connection of the two Susquehanna nuclear units was recognized at the time of the 1976 study. Consequently, PP&L's losses have now been evaluated for the 1985 post-Susquehanna system and the appropriateness of the 3-2-1 weighting factors has been reviewed.

II. Necessity for Re-evaluation

Production Facility Losses. Losses occurring on the 500 kV and 230 kV transmission systems and in the unit transformers are referred to as production facility losses because they are a function of generation rather than load. Changes in system configuration and operation since 1976 will impact losses on all three operating levels which make up the production facilities.

There will be an increase in 500 kV losses from the 1976 level for two reasons. PP&L's share of 500 kV losses will increase with the increase in energy production due to addition of Susquehanna #2 generator (1050 MW) and the expansion of the 500 kV network to connect this large increment of generation into the PJM transmission system.

The second reason is the increased west-to-east power flows on the 500 kV system because of two-party transactions between eastern PJM companies and midwestern utilities. Losses due to these transactions are assigned to the purchasing companies before the remaining 500 kV losses are allocated among the PJM members based on their ownership of generation and transmission. A share of the two-party losses which is proportional to PP&L's two-party transactions is assigned to PP&L.

Three changes which impact losses on PP&L's 230 kV transmission system will have occurred between 1976 and 1985. First, Martins Creek generator #4 (820 MW) came on line late in 1976. Operation of this large oil-fired cyclical unit on the eastern edge of PP&L's 230 kV system can affect power flow across the 230 kV system. In particular, it can reduce losses by reducing west-to-east power flow.

Two-party transactions are the second change that has affected PP&L's 230 kV losses since 1976. The two-party transactions increase power flow across PP&L's 230 kV system and increase PP&L's losses. Both PP&L's assigned share of the 500 kV losses due to two-party transactions and any increase in PP&L's 230 kV losses because of these transactions are included in PP&L's losses as reported on FERC Form 1.

The third and most significant change is the connection of Susquehanna #1 generator (1050 MW) to the 230 kV system. Losses on the 230 kV transmission system increase with the addition of this base-load generation.

Addition of the two base-load Susquehanna units will also increase unit transformer losses. However, this increase is partially offset by reduced output of Martins Creek #3 and #4 generators because of shifts in the mix of nuclear, coal, and oil units operating on PJM.

All these changes will tend to increase PP&L's exports and change power flow and losses on its transmission system. Re-evaluation of system losses is required to identify the impact of these significant changes to system configuration and operation since the 1976 study.

Supply Facility Losses. Losses occurring on the 138/69 kV subtransmission system and the primary and secondary distribution systems are referred to as supply facility losses because they are a function of load. No changes have occurred in system configuration or operation since 1976 that would significantly impact losses on the three operating levels which make up the supply facilities.

Losses on the 138/69 kV subtransmission system will remain the same percentage of system net output as in 1976 since there have been no significant changes in planning or operating this system. Consideration was given to the impact of the partial conversion of the Lehigh Division from 69 kV to 138 kV operation, which was completed in 1981. Only about 5 percent of PP&L's load was involved in this conversion. Although copper losses were reduced by use of the higher voltage, additional transformer capacity associated with the conversion increased core losses. The net effect of the Lehigh conversion has not significantly changed the system 138/69 kV losses. These losses can still be represented as the percentage of net output that was calculated in the 1976 study.

Losses on the primary distribution system can be represented as the same percentage of system net output as in 1976 since there have been no significant changes in planning or operating this system.

About 90 percent of secondary losses occur in the distribution transformers. Since 1976, both the number of transformers and the secondary load have grown at about the same annual rate. Consequently, secondary losses can be represented as the same percentage of net output.

Summary. This preliminary evaluation of the production and supply facilities indicated that losses on the production facilities might change significantly between 1976 and 1985, but losses occurring on the supply facilities will remain the same fraction of net output. Therefore, re-evaluation of losses occurring on the 500 kV and 230 kV transmission systems and in the unit transformers was indicated. However, losses on the 138/69 kV subtransmission system and on the primary and secondary distribution systems could be based on the results of the 1976 study. Therefore, the percentages of net output determined in the 1976 study were used to estimate the losses occurring on the supply facilities.

III. Calculation of Annual Energy Losses

System Representation. Production facility losses were calculated by AC load flow as was done in the 1976 study. However, the manner of representing the effects of load cycle, generation outages, and PJM conditions was different because of the characteristics of available data. For both studies, a manageable sample of typical hours was required. Historical data were available to represent a sample of actual conditions in 1976, but projected PP&L and PJM loads had to be used to represent a sample of typical future conditions expected in 1985.

The 1976 study was based on actual hourly load, generation, and tie line flows available from the System Operator's logs. A sample of twenty-four hours, the twelve monthly peak hours and 4 AM hours for the same days, was used to represent system conditions throughout the year. The actual PP&L load and any outages of PP&L generators were represented for each sample hour in the computer program. Fixing tie line flows at actual values isolated the PP&L system and neutralized the effect of PJM conditions on PP&L losses. These twenty-four cases were used to determine 230 kV and unit transformer losses as a function of PP&L internal generation. A generation duration curve based on recorded hourly data was used to calculate annual energy losses from the twenty-four sample hours.

This procedure could not be used to study the 1985 system since actual hourly data were not available. Calculation of 1985 annual energy losses was, therefore, based on a weighted average of losses during expected typical system conditions.

Expected typical load data for both PP&L and PJM were available in the study, Collection of Cost of Service Information Under Section 133 of the Public Utility Regulatory Policies Act of 1978 - Subpart D, dated 6/2/82. This report provided expected hourly load data for both PP&L and PJM for a typical weekday and typical weekend day for each month in 1985. These typical weekday, weekend day, and light load conditions were then represented in the computer load flow program for each month. A weighted average of losses calculated in this thirty-six case sample provided annual energy losses on the 500 kV and 230 kV transmission systems and in the unit transformers. Since data were available for both PP&L and PJM hourly loads for a typical day, it was not necessary to fix tie line flows to isolate the PP&L system from PJM conditions. The flows on the lines between PP&L and PJM could be determined by the load flow program.

Since 500 kV, 230 kV, and unit transformer losses are a function of generation, appropriate representation of both the level and location of PP&L and PJM generation was essential to obtain satisfactory results. The effect of generator outages was incorporated into the thirty-six case sample in a manner which would maintain average line loadings and also represent variations in line flows due to specific generator outages.

The effects of daily, weekly, and annual variations of generation on line flows and losses were also represented in the thirty-six load flow cases.

This was done to account for the variations in the amount and location of PP&L and PJM generation over these load cycles. These variations affect transmission line flows and losses. Use of weekday, weekend, and light load cases for each month incorporated the effects of the three load cycles into the load flow representation. The output of PP&L and PJM generators for each case corresponded to the economic dispatch for that particular PJM load level.

Generator outages throughout the PJM System were represented by reducing the output of each unit by an amount proportional to the average time the unit is unavailable. Thus, average levels of generation were maintained. Since all generators connected to the 500 kV grid are base-load units, representing the average level of generation throughout the year resulted in average line flows and losses in the load flow cases. Similarly, representing average levels of generation within the other PJM companies resulted in typical average flows on tie lines to neighboring companies.

Use of average levels of generation was a satisfactory representation for the 500 kV and PJM company systems. However, a more detailed representation was required for PP&L's internal generation. Calculation of PP&L 230 kV losses required representing variations in 230 kV transmission line flows due to scheduled annual maintenance outages of generators, which last several weeks or months. These outages were specifically represented in the load flow cases because of the effect of these relatively long outages on the prevailing west-to-east power flow. Outage of a generator at Susquehanna, Montour, or Brunner Island reduces the west-to-east power flow and 230 kV losses. Outage of a generator at Martins Creek increases west-to-east power flow and losses. The effects of these prolonged generator outages were, therefore, represented by taking the generators out of service in the months in which their annual maintenance outages are scheduled.

Average values of output were used to represent outages due to equipment failures, which either take the generator out of service immediately or require it to be taken out of service before the next scheduled annual maintenance outage. These outages are of relatively short duration and are appropriately represented by using average output. The average output is obtained by reducing the normal output of each PP&L unit by an amount proportional to the average time the unit is expected to be unavailable due to these outages. This dual model of PP&L generator outages represented the full range of typical operating conditions. Consequently, the load flow calculation provided typical average values of 230 kV and unit transformer losses.

Projected average values were used to represent two-party transactions between PJM member companies and companies outside the PJM pool. Imports were assumed to be 3000 MW in the weekday cases and 1200 MW in the weekend and light load cases.

Results. Increased PP&L generation and PJM two-party imports increase PP&L's annual energy losses as a percentage of annual net output.

However, total losses will decrease as a percentage of PP&L's annual generated energy.

Table I, on page 3, compares projected system losses for 1985 at each operating level, 500 kV to secondary with those for 1976. Losses are compared in gigawatthours, percent of total losses, and percent of net output. An increase in losses on the production facilities is indicated.

The increase in losses on the production facilities results in an increase in total losses as a percentage of net output. An increase in calculated losses from 8.1 percent of net output in 1976 to 9.0 percent in 1985 is indicated. This increase is the result of the large incremental increase in energy production, which results in a short-term growth in PP&L's generation at a rate greater than the growth in PP&L's load (net output) over the same period.

Losses on production facilities comprise 30 percent of total losses in 1985 compared to 22 percent in 1976. This increase is due to the large incremental increase in PP&L generation. Because no further generation increases are planned, losses on the production facilities will not significantly change for some time even though the PP&L system load continues to grow. The losses on the production facilities will trend toward the lower percentages of net output experienced in the past.

Table II, on page 4, compares PP&L's generation, net exports, net output, and losses for 1985 with corresponding values for 1976. Production for export to other utilities increases from 23 percent of total production in 1976 to 37 percent in 1985. Total losses decrease from 6.3 percent of generation in 1976 to 5.7 percent in 1985.

The increase in losses on the production facilities is associated with the portion of PP&L's overall generation that is exported. The revenues from these exports are a significant net benefit to PP&L's customers because they reduce the cost of energy generated to supply the load of PP&L's customers.

In summary, the standard convention, used in FERC Form 1, of expressing losses as a percentage of net output indicates a significant increase in losses because of increased energy production and two-party imports by PJM-member companies including PP&L. However, the actual effects of a change in losses due to increased energy production and the imports of energy is seen more clearly if losses are expressed as a percentage of generated energy. Table II shows that losses actually decrease when expressed as a percentage of generated energy.

The increase in energy production and the importation of lower cost energy significantly increase PP&L's energy exports. Although the losses associated with this energy are allocated to PP&L's customers according to the standard convention, PP&L's customers actually benefit substantially because their cost of service is reduced by the revenues received for the exported energy.

IV. Allocation of Losses

The purpose of this study was to determine whether the 3-2-1 weighting factors, which have been used for allocating losses among secondary, primary, and transmission customers will continue to be appropriate for the post-Susquehanna system. The continued appropriateness of these weighting factors was reviewed by comparing allocation by means of the weighting factors with allocation directly from each of the operating levels to secondary, primary, and transmission customers. Close agreement between the two methods indicated that use of 3-2-1 weighting factors will still be appropriate after the two Susquehanna generators are connected to the transmission system.

Use of weighting factors facilitates the allocation of annual energy losses among secondary, primary, and transmission customers by eliminating the need for a detailed calculation of the losses occurring at each operating level. Use of the weighting factors requires only the multiplication of secondary sales by the factor of three, primary sales by two, and transmission sales by one. Total losses are then divided in proportion to the values of these weighted sales.

Direct allocation of losses is made by dividing the losses occurring at each operating level among secondary, primary, or transmission customers supplied by that operating level. The division is made in proportion to annual sales. Losses at the 500 kV, 230 kV, unit transformer, and 138/69 kV operating levels are divided among secondary, primary, and transmission customers. Losses at the primary operating level are divided only between secondary and primary customers. Secondary losses are allocated solely to secondary customers.

The continued appropriateness of the 3-2-1 weighting factors is demonstrated in Table III on page 5 by comparing the losses allocated to secondary, primary, and transmission customers by each method. The comparison is made in gigawatthours, percentage of total losses, and percentage of net output.

Production facility losses are the major component of losses allocated to transmission customers. Additional losses allocated to transmission customers because of the increase in production facility losses are, therefore, a significant fraction of the losses allocated to transmission customers.

Although a proportionally larger share of the total increase in production facility losses is actually allocated to secondary customers due to their larger share of sales, these losses comprise only a small fraction of total losses allocated to secondary customers. Consequently, the increase in production facility losses results in a relatively small percentage increase in losses allocated to secondary customers.

The net effect of the increased production losses is an increase in transmission customer losses and a decrease in secondary customer losses as a percentage of total losses in the first year after the addition. In subsequent years, the small difference (2 percent) in the percentage of total losses allocated to transmission and secondary customers by the two methods will become even less. Losses on the 138/69 kV, primary, and secondary operating levels will increase as the load grows. 500 kV, 230 kV, and unit transformer losses will remain about the same because no additional generation is planned. Thus, the effect on direct allocation of losses will be a decrease in the percentage of total losses allocated to transmission customers and an increase in the percentage allocated to secondary customers. Direct allocation will, therefore, agree even more closely to allocation by the 3-2-1 weighting factors in subsequent years.

Allocation by means of the 3-2-1 weighting factors will continue to provide fair and equitable allocation of losses for the post-Susquehanna system. For 1985, their use provides close agreement with direct allocation. The slight initial differences due to the large change on the production facilities will steadily decrease as system load grows without a corresponding increase in generation.

V. Effect of Two-Party Transactions

Two-party transactions increase west-to-east power flow on both the PJM 500 kV and the PP&L 230 kV transmission systems. The losses on the 500 kV
system due to two-party transactions are allocated among the member companies in proportion to their shares of the transactions. Since PP&L has two-party transactions with companies outside PJM, a portion of the additional 500 kV losses due to these transactions is allocated to PP&L.

Losses on PP&L's 230 kV transmission system also tend to increase due to increased west-to-east power flow. These losses are included in PP&L's net output.

The effect of two-party transactions on PP&L's losses was evaluated by running a second set of thirty-six cases. These cases were identical to those used to calculate losses for expected 1985 conditions. However, imports due to two-party transactions were reduced to zero in all cases. The reduction of imports increased generation within PJM. The increase of generation, especially in eastern PJM, reduced losses on the transmission system.

Subtracting PP&L's losses in this second set of cases from PP&L's losses in the set for expected conditions showed that only 3 percent (77 GWH) of PP&L's total losses are due to two-party transactions. This small increase in total losses has no significant effect on the appropriateness of the 3-2-1 ratio.

VI. Sensitivity To Martins Creek #3 & #4 Output

Because the oil-fired units at Martins Creek are sensitive to the PJM running rate, their output varies with the PJM load cycle in contrast to the base-load operation of the coal-fired units at Brunner Island and Montour and the nuclear units at Susquehanna. Martins Creek #3 & #4 are located on the eastern edge of the PP&L system. Since power generally flows from west-to-east across PP&L's 230 kV transmission system, an increase in output of these generators will correspond to a reduction of line loadings and losses. A change in the cost of oil relative to other fuels or a change in two-party transactions could significantly alter their annual output.

Consequently, the sensitivity of losses to a wide variation in the output of Martins Creek #3 & #4 was evaluated. In the cases representing expected conditions, Martins Creek #3 & #4 were economically dispatched with the other PJM and PP&L units. The two Martins Creek units were dispatched only during the peak load months of January, February, June, July, and August. Even during these months, the units were dispatched at less than full output. This representation corresponded to an annual output of 1100 GWH.

In a second series of weekday cases, Martins Creek #3 & #4 were dispatched at full output except for the adjustments for forced and scheduled outages. These cases represented the units at full output for 15 hours on every weekday on which they were available. This representation corresponded to an annual output of 4700 GWH.

The actual output of these two units in 1985 is expected to fall within this range of 1100 GWH to 4700 GWH for all reasonable variations in the cost of oil and two-party transactions. Production level losses decrease 35 GWH (five percent) from 696 GWH to 661 GWH due to the increase in Martins Creek output. Both 500 kV and 230 kV transmission losses decrease because of the increase in eastern generation. However, this decrease is partially overridden by increased unit-transformer losses. The small net decrease in total losses does not change the percentages of losses allocated to secondary, primary, and transmission customers. The 3-2-1 weighting factors are appropriate over the entire range of variation in Martins Creek #3 and #4 output.

VII. Summary

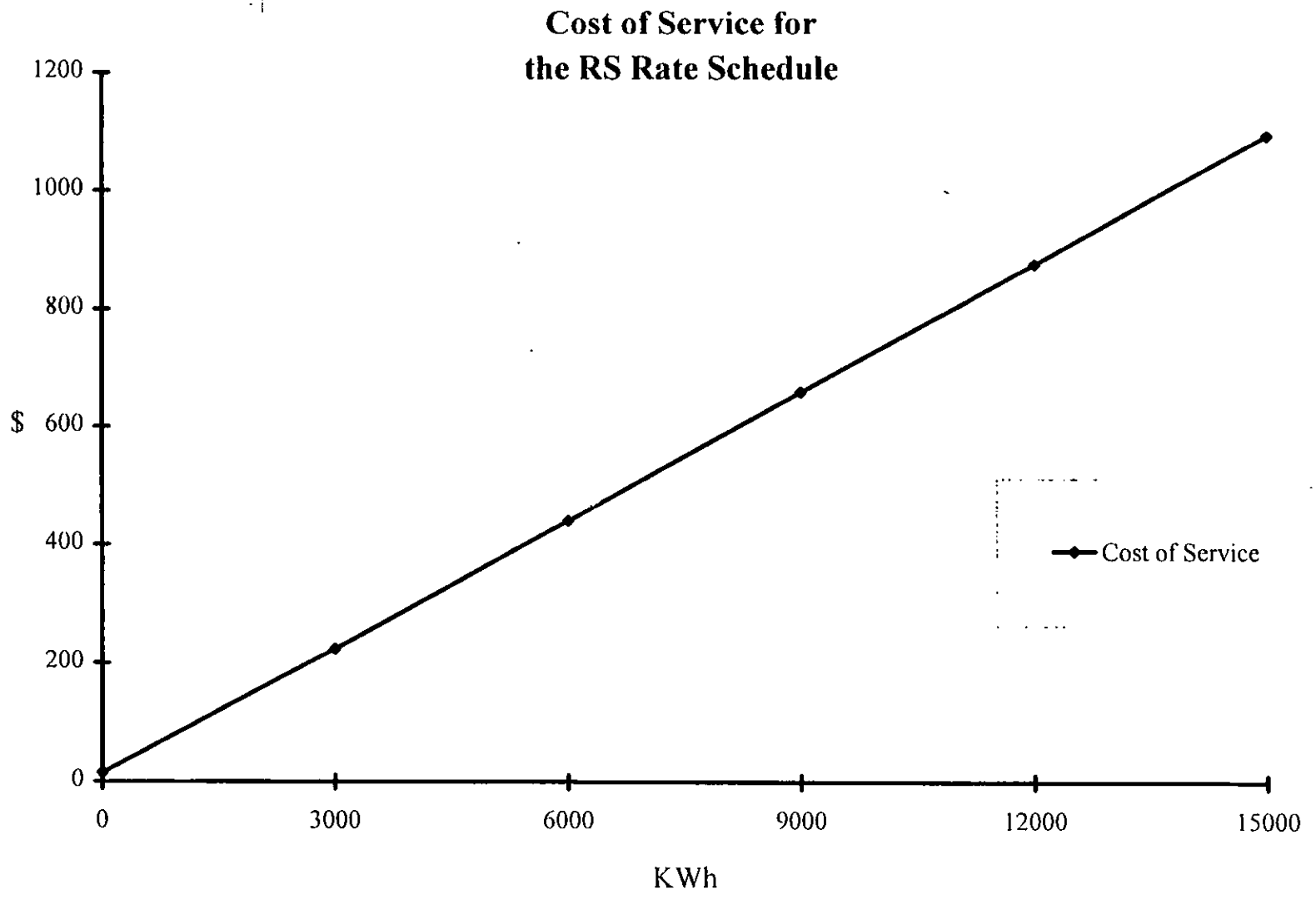
This analysis of post-Susquehanna losses indicates that the 3-2-1 weighting factors should continue to be used for allocating annual energy losses among PP&L customers. The expected increase in losses on the production facilities due to the large increase in generation will not materially affect the shares of total losses which should be allocated to secondary, primary, and transmission customers.

(cvc/CA-1)

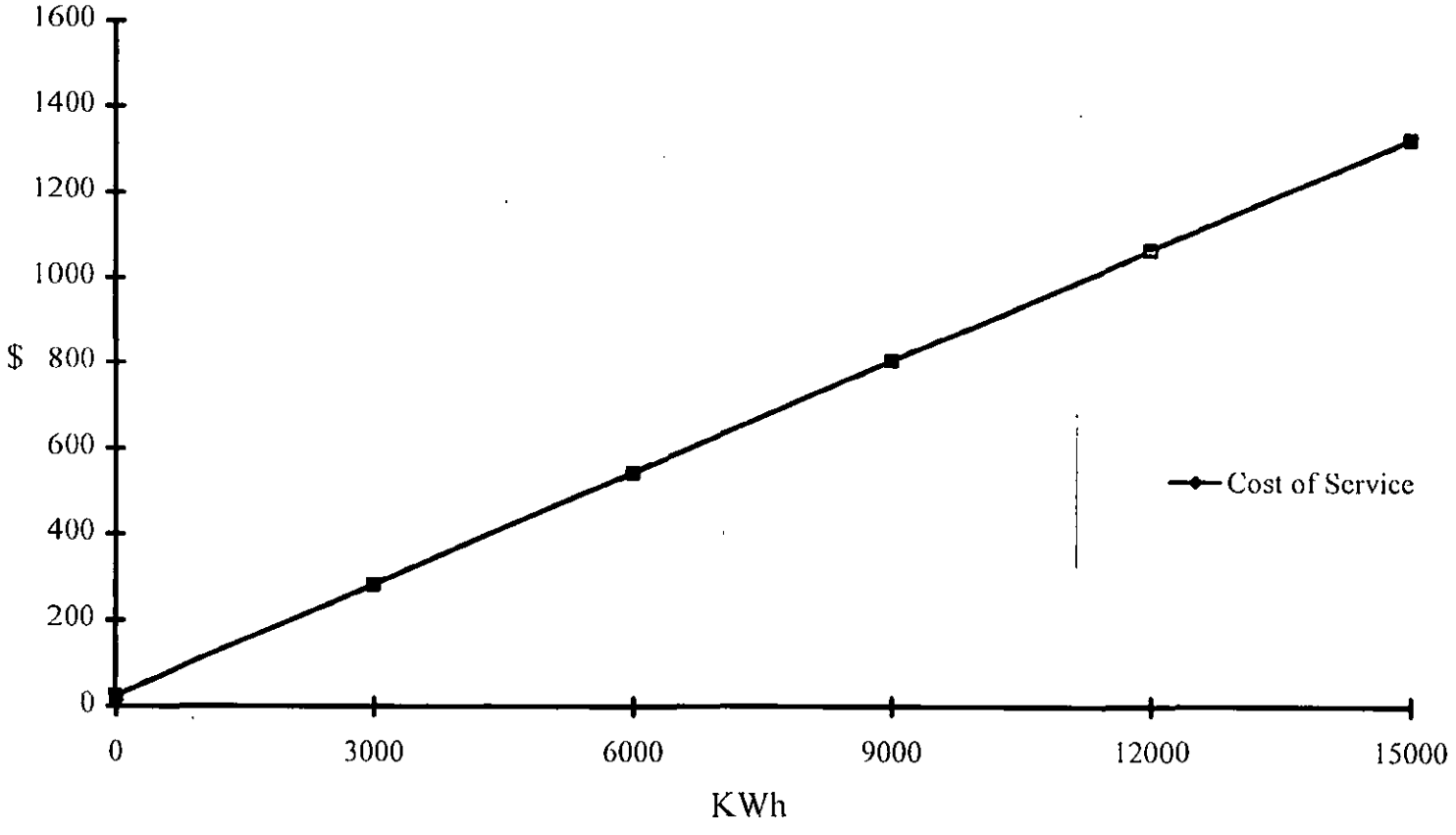
RP - I.2.
O. G. Kasper

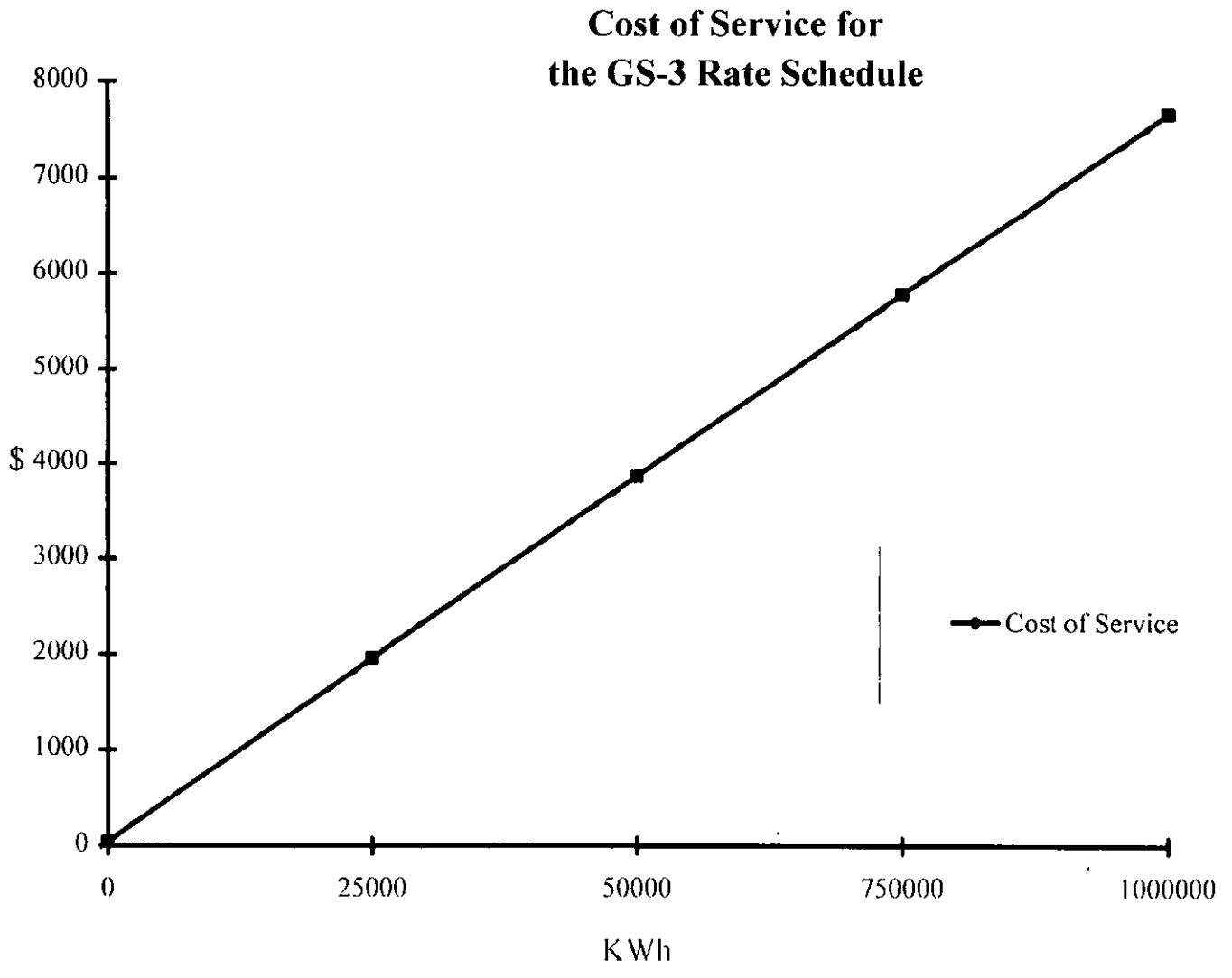
Q. Provide comparisons in either graphical or tabular form showing costs, as defined in the cost-of-service study for base rate revenues and usage for the residential and demand/energy rate schedules. Demand *shall be for* representative loads for each demand/energy rate schedule.

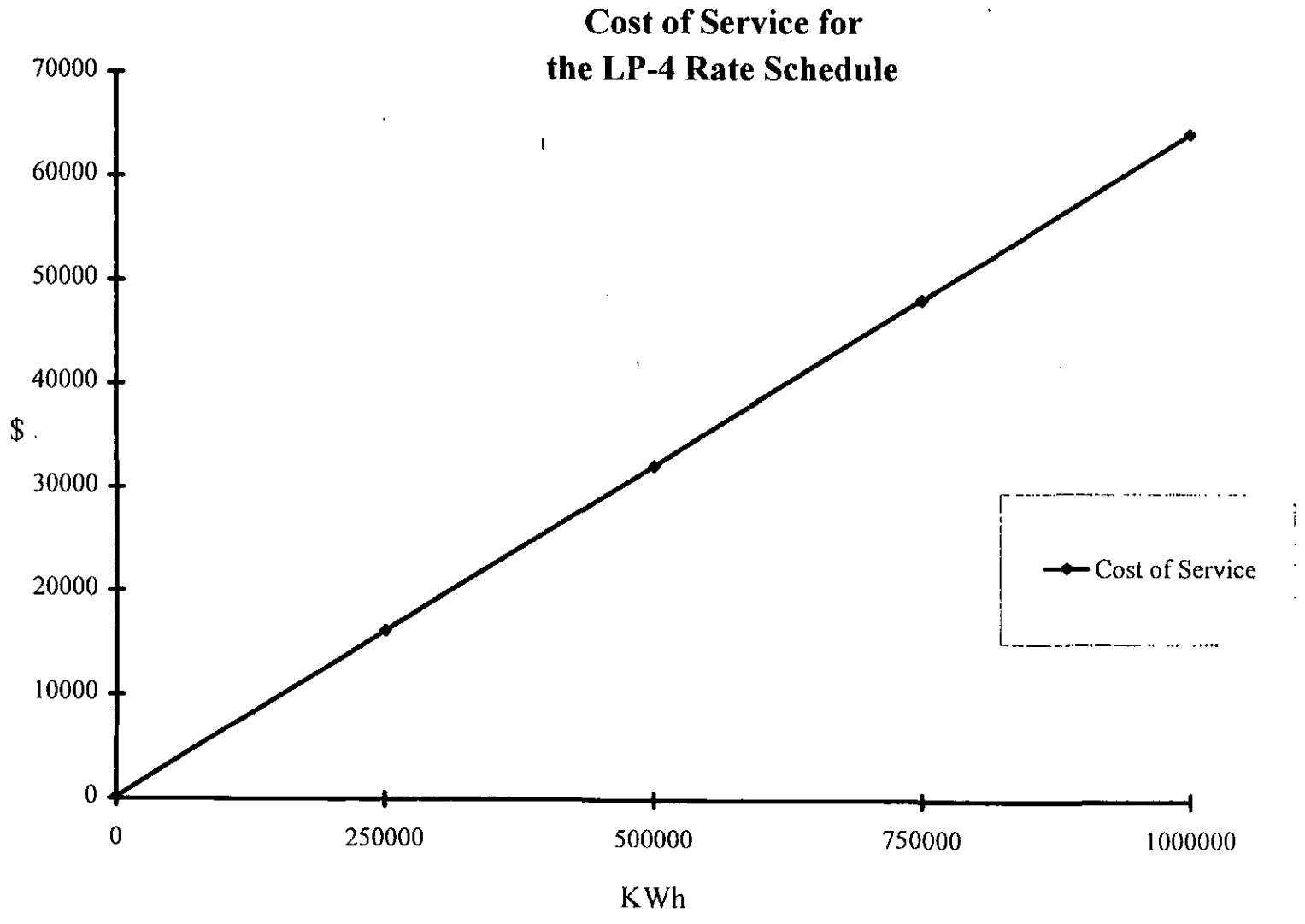
A. See Attachment 1.

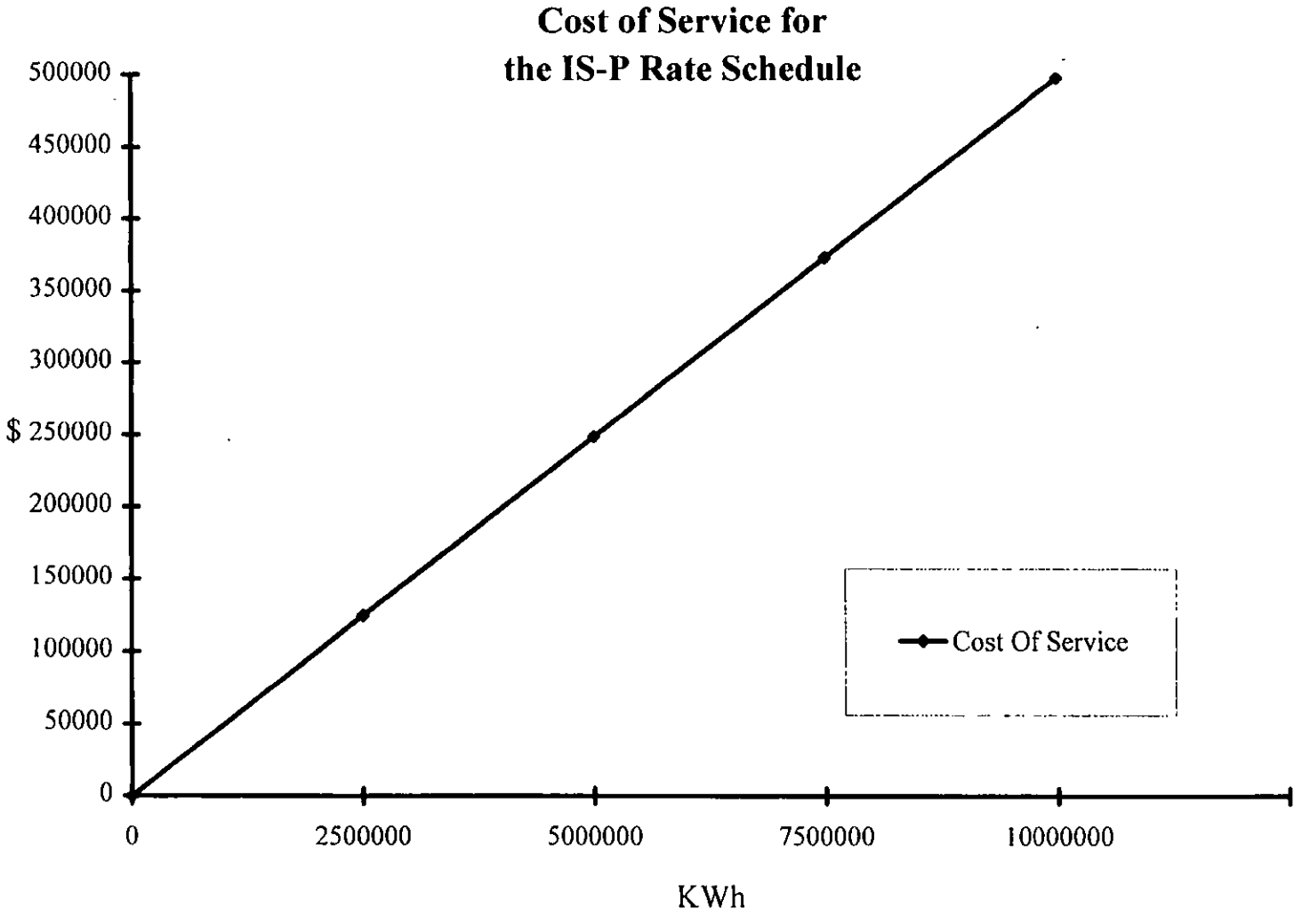

Cost of Service for
the RS Rate Schedule
1200
1000
800
$ 600
400
200
0
0
3000
6000
9000
12000
15000
KWh
Cost of Service

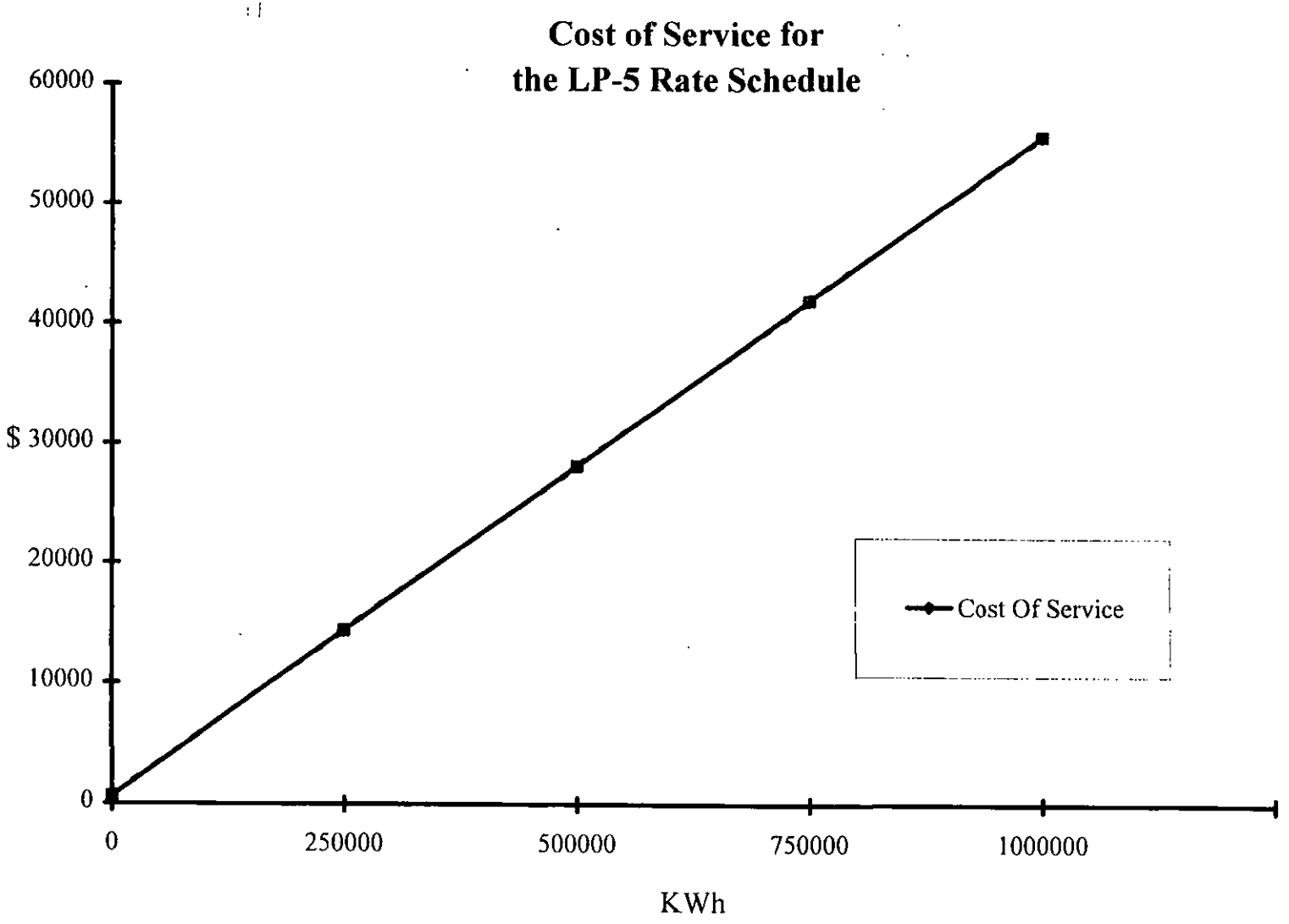
Cost of Service for the GS-1 Rate Schedule

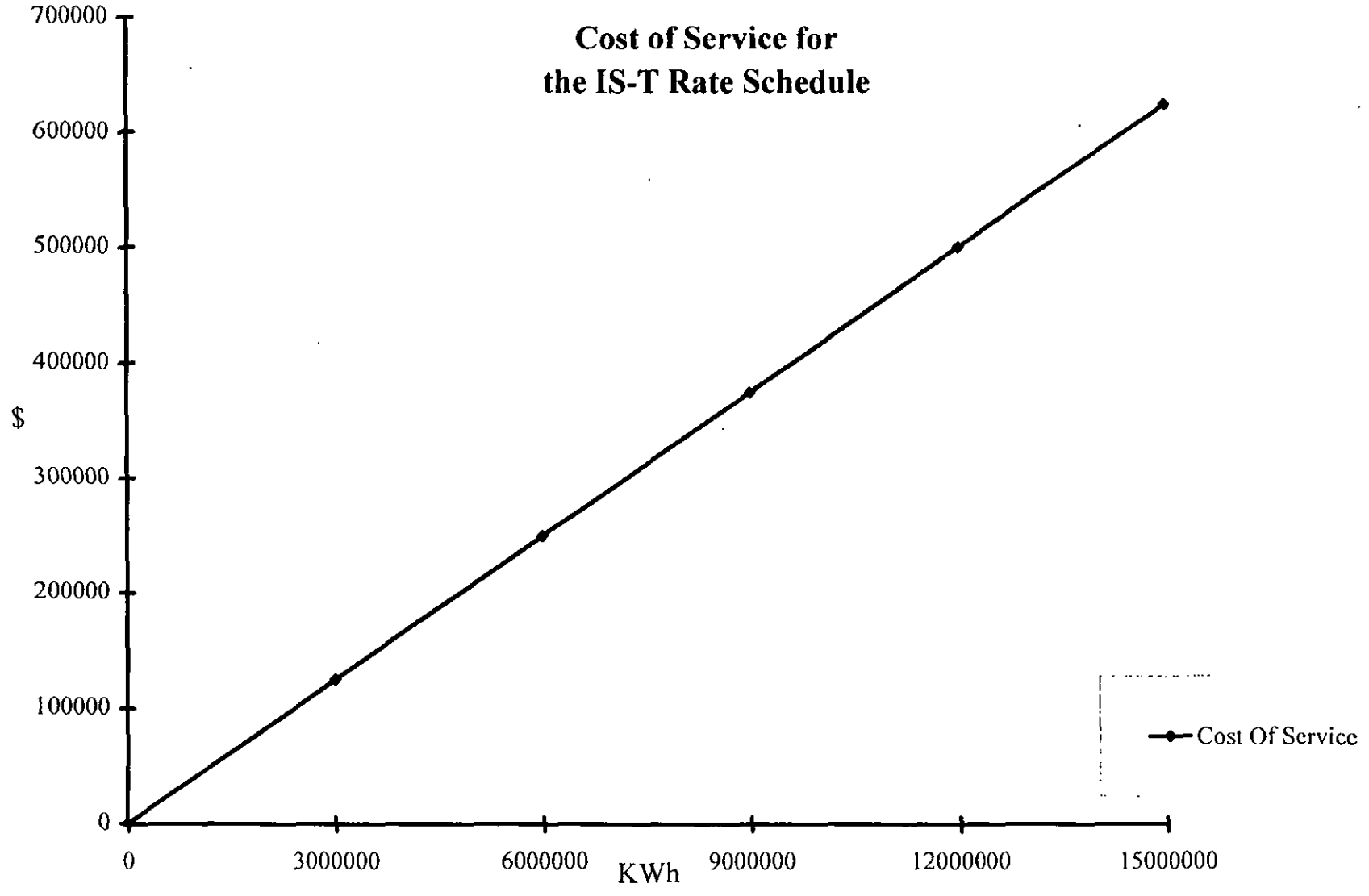



Cost of Service for
the GS-3 Rate Schedule
8000
7000
6000
5000
$ 4000
3000
2000
1000
0
0
25000
50000
750000
1000000
KWh
Cost of Service


Cost of Service for
the LP-4 Rate Schedule
70000
60000
50000
40000
$
30000
20000
10000
0
0
250000
500000
750000
1000000
KWh
Cost of Service


Cost of Service for
the IS-P Rate Schedule
500000
450000
400000
350000
300000
$ 250000
200000
150000
100000
50000
0
0
2500000
5000000
7500000
10000000
KWh
Cost Of Service


Cost of Service for
the LP-5 Rate Schedule
60000
50000
40000
$ 30000
20000
10000
0
0
250000
500000
750000
1000000
KWh
Cost Of Service


Cost of Service for
the IS-T Rate Schedule
700000
600000
500000
400000
$
300000
200000
100000
0
0
3000000
6000000
9000000
12000000
15000000
KWh
Cost Of Service

Q. Provide, in hard copy and on a computer disk, for each month of the most recent 10-year period, if available, for each rate class in the class cost-of-service study, the following:

(a) Generation level demand coincident with the system peak.
(b) Generation level maximum class demand (i.e., non-coincident peak demand) for annual peak.
(c) Number of customers.
(d) Annual kilowatt hours at generation.
(e) Date, time, and level of monthly peak demand for both Pennsylvania jurisdiction and total company system loads covered by an integrated dispatch and total of the classes covered by the cost-of-service study.

A. (a) See Attachment 1.
(b) See Attachment 2.
(c) See Attachment 3.
(d) See Attachment 4.
(e) See Attachment 5.

RP - I.3.

ATTACHMENT 1

PENNSYLVANIA POWER & LIGHT COMPANY
CONTRIBUTION TO MONTHLY SYSTEM PEAKS
GENERATION LEVEL - IN KW
YEAR ENDED DECEMBER 31, 1996

	4-Jan-96 1900	6-Feb-96 800	8-Mar-96 2000	9-Apr-96 1000	20-May-96 1500	17-Jun-96 1400	8-Jul-96 1500	23-Aug-96 1600	9-Sep-96 1700	29-Oct-96 1900	27-Nov-96 1800	20-Dec-96 1800
PUC GROUP												
RS	2,592,708	2,903,667	2,594,871	1,649,511	1,477,218	1,552,417	1,621,697	1,707,747	1,656,588	1,584,864	2,212,637	2,550,068
RTS	218,105	64,622	212,194	33,545	28,697	30,604	31,374	34,735	33,489	79,529	217,091	232,296
GS-1	237,808	284,805	248,066	279,876	311,725	306,459	314,707	307,371	269,048	186,818	222,808	250,923
GS-3	1,125,429	1,322,157	1,040,095	1,213,124	1,486,008	1,484,367	1,469,166	1,455,141	1,370,134	953,667	1,102,689	1,045,462
LP-4	583,443	594,886	566,320	658,167	712,633	737,129	718,387	760,770	718,582	549,678	600,586	603,374
IS-P	55,668	65,102	53,898	63,178	66,531	69,204	60,751	65,244	62,740	59,357	56,397	55,802
LP-5	390,259	375,167	363,748	389,376	407,523	432,736	411,376	423,671	434,683	390,049	369,206	380,947
IS-T	261,824	266,332	285,142	288,131	296,652	301,239	300,238	300,490	297,206	300,251	268,017	296,283
LP-6	50,284	61,734	58,106	78,105	82,005	87,018	90,523	86,336	76,838	67,871	68,306	60,900
LPEP	17,118	24,030	15,014	19,589	4,376	2,223	1,141	556	13,063	20,912	21,879	20,355
IS-A	92,311	77,572	80,905	80,011	85,101	69,251	64,929	6,740	88,572	83,180	85,797	84,129
GH	124,163	202,758	117,343	136,577	103,477	85,652	74,854	77,605	68,612	49,463	87,496	90,355
SL/AL	26,847	7,186	26,738	62	62	62	62	62	62	26,724	26,564	26,805
TOTAL PUC	5,775,967	6,250,018	5,662,440	4,889,252	5,062,008	5,158,361	5,159,205	5,226,468	5,089,617	4,352,363	5,339,473	5,697,699

PENNSYLVANIA POWER & LIGHT COMPANY
CONTRIBUTION TO MONTHLY SYSTEM PEAKS
GENERATION LEVEL - IN KW
YEAR ENDED DECEMBER 31, 1995

	5-Jan-95 800	6-Feb-95 1900	10-Mar-95 800	5-Apr-95 900	24-May-95 1500	20-Jun-95 1700	27-Jul-95 1700	2-Aug-95 1400	7-Sep-95 1700	30-Oct-95 1800	14-Nov-95 1800	11-Dec-95 1900
PUC GROUP												
RS	2,491,716	2,899,035	2,196,163	1,761,024	863,519	1,863,402	1,995,395	1,814,967	1,392,476	1,615,240	2,283,648	2,896,596
RTS	56,371	234,816	49,829	35,315	16,183	38,626	40,603	36,413	27,330	95,655	185,467	222,796
GS-1	248,523	251,513	232,930	259,232	254,068	276,284	308,222	338,099	266,764	178,199	213,833	246,067
GS-3	1,306,052	1,106,941	1,196,528	1,227,750	1,402,744	1,381,539	1,424,788	1,635,765	1,379,931	1,035,424	1,005,075	1,108,318
LP-4	611,368	615,455	600,130	625,268	695,501	714,563	745,394	797,574	696,734	558,007	588,121	593,149
IS-P	61,900	53,551	59,180	63,981	64,721	63,193	60,325	68,050	59,755	54,946	61,213	57,832
LP-5	440,581	426,414	435,643	460,122	490,085	484,779	494,706	520,782	486,494	379,917	390,337	372,858
IS-T	301,719	300,110	309,174	310,131	332,559	335,312	332,006	328,982	339,424	312,759	301,751	264,345
LP-6	0	0	0	0	0	0	0	0	0	54,041	69,243	64,800
LPEP	35,628	30,703	30,580	28,216	23,100	23,055	22,341	7,180	17,888	18,242	21,898	19,263
IS-A	84,446	76,759	86,953	91,744	91,332	73,026	82,812	83,210	84,113	86,582	84,703	83,087
GH	193,600	151,544	173,665	152,090	100,693	73,894	80,066	96,774	76,785	59,462	92,573	139,271
SL/AL	15,460	26,550	62	62	62	62	62	62	62	26,092	26,577	26,626
TOTAL PUC	5,847,364	6,173,391	5,370,837	5,014,935	4,334,567	5,327,735	5,586,720	5,727,858	4,827,756	4,474,566	5,324,439	6,095,008

PENNSYLVANIA POWER & LIGHT COMPANY
CONTRIBUTION TO MONTHLY SYSTEM PEAKS
GENERATION LEVEL - IN KW
YEAR ENDED DECEMBER 31, 1994

	18-Jan-94 1900	2-Feb-94 800	2-Mar-94 1900	8-Apr-94 800	23-May-94 1600	15-Jun-94 1400	20-Jul-94 1800	4-Aug-94 1600	14-Sep-94 1200	26-Oct-94 900	23-Nov-94 1800	12-Dec-94 1900
PUC GROUP												
RS	3,147,833	2,716,674	2,717,379	1,777,868	1,074,055	1,570,601	2,197,204	1,668,711	957,936	1,395,313	2,030,321	2,334,673
RTS	257,775	54,638	218,542	38,030	18,884	35,882	85,719	37,047	15,824	24,472	177,043	169,088
GS-1	233,183	239,908	199,901	168,553	241,876	309,714	273,085	313,749	222,717	210,865	177,011	213,515
GS-3	944,101	1,143,503	821,069	962,817	1,237,268	1,510,307	1,122,400	1,328,136	1,380,020	1,157,999	992,645	1,046,306
LP-4	550,446	650,195	537,278	591,269	639,251	771,331	685,002	705,649	689,925	592,939	549,576	596,151
IS-P	33,638	38,644	32,011	34,886	41,909	47,102	48,243	59,294	62,108	61,864	53,141	56,752
LP-5	445,143	464,835	424,174	482,411	480,068	568,146	485,263	499,487	465,186	452,073	406,471	425,848
IS-T	198,126	228,538	214,783	234,747	254,220	265,354	306,387	295,416	306,012	320,331	299,215	304,310
LPEP	17,384	29,498	32,551	33,260	16,431	33,265	24,438	22,559	5,976	10,998	10,080	7,533
IS-A	63,107	71,999	55,141	62,439	71,782	24,179	65,152	51,829	53,523	91,193	14,951	60,583
GH	158,325	216,751	120,337	126,838	87,482	120,054	69,267	89,111	108,139	113,061	88,655	113,280
SL/AL	26,567	8,450	26,479	62	62	62	62	62	62	62	26,446	26,429
TOTAL PUC	6,075,628	5,863,633	5,399,645	4,513,180	4,163,288	5,255,997	5,362,222	5,071,050	4,267,428	4,431,170	4,825,555	5,354,468

PENNSYLVANIA POWER & LIGHT COMPANY
CONTRIBUTION TO MONTHLY SYSTEM PEAKS
GENERATION LEVEL - IN KW
YEAR ENDED DECEMBER 31, 1993

	11-Jan-93 1800	2-Feb-93 800	19-Mar-93 800	5-Apr-93 900	11-May-93 1700	18-Jun-93 1700	8-Jul-93 1400	26-Aug-93 1700	3-Sep-93 1500	14-Oct-93 1000	1-Nov-93 1900	29-Dec-93 1800
PUC GROUP												
RS	2,524,499	2,831,078	2,634,999	1,721,141	1,304,369	1,670,236	1,846,729	1,974,463	1,717,507	1,438,701	2,230,291	3,098,693
GS-1	200,504	212,995	205,648	216,308	256,275	272,840	357,509	308,383	299,736	204,180	166,506	255,558
GS-3	1,005,610	1,072,135	1,015,736	1,021,284	1,063,406	1,152,130	1,348,222	1,189,281	1,286,223	1,133,376	909,008	955,976
LP-4	580,092	651,736	620,309	584,578	637,975	665,089	675,454	674,750	708,956	606,179	551,414	524,736
IS-P	13,899	15,231	20,271	23,381	24,669	27,598	23,540	30,757	29,536	35,212	37,015	29,449
LP-5	471,092	512,671	507,616	499,576	527,505	519,831	519,486	515,206	530,454	490,953	466,584	391,582
IS-T	194,282	189,689	191,406	188,037	208,915	185,459	203,536	216,969	215,298	227,304	237,274	222,045
LPEP	618	18,123	35,238	25,668	30,900	24,625	27,913	32,519	16,054	19,939	27,766	25,692
IS-A	84,808	62,787	73,257	23,658	94,860	76,424	38,470	100,105	95,787	100,443	64,555	12,640
GH	133,970	226,599	215,631	148,658	91,429	84,879	100,406	88,976	103,450	115,081	91,053	144,933
SL/AL	26,462	8,422	62	62	62	62	62	62	62	62	26,454	26,429
TOTAL PUC	5,235,836	5,801,466	5,520,173	4,452,351	4,240,365	4,679,173	5,141,327	5,131,471	5,003,063	4,371,430	4,807,920	5,687,733

PENNSYLVANIA POWER & LIGHT COMPANY
CONTRIBUTION TO MONTHLY SYSTEM PEAKS
GENERATION LEVEL - IN KW
YEAR ENDED DECEMBER 31, 1992

	16-Jan-92 1800	10-Feb-92 800	16-Mar-92 900	2-Apr-92 2000	8-May-92 1100	8-Jun-92 1400	14-Jul-92 1500	27-Aug-92 1400	10-Sep-92 1300	20-Oct-92 900	16-Nov-92 900	10-Dec-92 1800
PUC GROUP												
RS	2,819,366	2,628,005	2,181,836	2,089,809	1,243,356	1,186,801	1,573,293	1,449,173	1,178,464	1,616,607	1,978,016	2,654,673
GS-1	243,497	208,180	223,067	208,867	237,923	236,084	326,146	322,106	295,597	227,844	184,240	210,223
GS-3	1,040,718	1,038,853	1,109,411	832,443	1,050,084	1,337,616	1,319,971	1,384,544	1,410,469	1,098,280	1,025,972	885,129
LP-4	599,042	620,918	625,908	523,079	585,282	705,713	717,807	745,032	761,527	617,433	598,567	539,635
IS-P	0	0	0	0	0	0	0	801	3,013	5,420	8,933	11,316
LP-5	668,962	650,919	678,322	673,795	687,481	733,002	729,011	575,708	574,817	498,700	494,812	471,789
IS-T	0	0	0	0	0	0	0	183,419	196,533	202,609	204,408	192,136
LPEP	1,237	3,710	0	1,030	720	26,358	8,648	4,428	927	1,030	825	1,133
IS-A	103,858	21,255	23,891	99,975	26,785	14,903	88,253	11,199	15,293	101,608	16,852	105,832
GH	171,022	230,324	222,867	108,521	114,286	112,989	99,547	108,126	132,941	161,544	161,924	112,105
SL/AL	26,321	4,871	62	26,267	62	62	62	62	62	62	62	26,388
TOTAL PUC	5,674,023	5,407,035	5,065,364	4,563,786	3,945,979	4,353,528	4,862,738	4,784,598	4,569,643	4,531,137	4,674,611	5,210,359

PENNSYLVANIA POWER & LIGHT COMPANY
CONTRIBUTION TO MONTHLY SYSTEM PEAKS
GENERATION LEVEL - IN KW
YEAR ENDED DECEMBER 31, 1991

	22-Jan-91 800	12-Feb-91 800	12-Mar-91 800	3-Apr-91 800	30-May-91 1500	17-Jun-91 1700	23-Jul-91 1400	29-Aug-91 1700	17-Sep-91 1700	21-Oct-91 900	27-Nov-91 800	19-Dec-91 800
PUC GROUP												
RS	2,609,456	2,294,436	2,037,996	1,687,638	1,373,037	1,777,859	1,806,087	1,962,375	1,787,393	1,548,287	2,085,854	2,575,751
GS-1	208,107	204,662	188,590	178,385	362,899	269,001	341,007	253,834	239,732	195,392	168,406	204,149
GS-3	989,544	973,819	965,686	906,469	1,301,375	1,095,840	1,352,407	1,120,544	1,121,933	1,039,890	974,380	1,004,186
LP-4	607,716	628,658	589,109	579,719	704,956	631,385	718,357	644,761	667,356	583,510	645,991	644,905
LP-5	620,356	630,316	606,193	597,776	722,093	693,845	712,656	740,029	729,402	642,954	665,667	685,366
LPEP	3,298	1,958	1,134	1,443	516	1,856	1,237	0	1,134	1,031	7,005	2,784
IS-A	81,624	104,503	70,725	85,367	12,681	77,790	76,987	88,427	55,344	15,384	17,924	102,526
GH	232,837	213,785	193,273	155,225	126,883	88,168	113,125	96,478	102,274	143,126	173,789	207,500
SL/AL	12,548	3,506	64	64	64	62	62	62	62	62	4,367	12,720
TOTAL PUC	5,365,486	5,055,643	4,652,770	4,192,086	4,604,504	4,635,806	5,121,925	4,906,510	4,704,630	4,169,636	4,743,383	5,439,887

PENNSYLVANIA POWER & LIGHT COMPANY
CONTRIBUTION TO MONTHLY SYSTEM PEAKS
GENERATION LEVEL - IN KW
YEAR ENDED DECEMBER 31, 1990

	8-Jan-90 1800	26-Feb-90 800	7-Mar-90 800	9-Apr-90 900	17-May-90 1200	29-Jun-90 1400	19-Jul-90 1700	28-Aug-90 1700	7-Sep-90 1400	30-Oct-90 800	12-Nov-90 1800	5-Dec-90 1800
PUC GROUP												
RS	2,238,839	2,591,846	2,300,873	1,718,211	978,351	1,384,317	1,741,356	1,754,375	1,169,379	1,668,914	2,023,397	2,250,523
GS-1	203,386	259,772	204,120	213,674	258,458	313,926	295,149	244,537	291,494	179,260	235,563	280,336
GS-3	863,980	967,117	965,145	964,283	1,116,512	1,176,179	1,108,459	1,078,154	1,218,196	871,673	839,963	922,686
LP-4	530,518	613,035	632,524	578,919	667,483	666,671	665,890	640,088	673,091	552,686	532,887	556,465
LP-5	655,568	630,461	631,032	633,158	698,161	700,928	722,102	736,926	744,562	664,884	657,079	681,437
IS-A	57,118	22,724	81,310	21,561	92,195	19,475	97,496	108,166	14,767	61,944	79,323	107,437
GH	132,385	251,130	215,606	167,926	118,781	109,489	91,326	93,580	125,056	143,237	104,890	123,931
SL/AL	26,135	64	64	64	64	64	64	64	64	64	25,790	25,800
TOTAL PUC	4,707,931	5,336,149	5,030,674	4,297,796	3,930,005	4,371,049	4,721,842	4,655,890	4,236,609	4,142,662	4,498,892	4,948,615

PENNSYLVANIA POWER & LIGHT COMPANY
CONTRIBUTION TO MONTHLY SYSTEM PEAKS
GENERATION LEVEL - IN KW
YEAR ENDED DECEMBER 31, 1989

	5-Jan-89 900	9-Feb-89 900	8-Mar-89 800	11-Apr-89 800	8-May-89 1000	27-Jun-89 1300	26-Jul-89 1400	4-Aug-89 1500	11-Sep-89 1400	19-Oct-89 1900	21-Nov-89 1900	22-Dec-89 900
PUC GROUP												
RS	2,276,601	2,255,271	2,360,291	1,776,963	1,412,666	1,444,368	1,546,915	1,592,960	1,219,827	1,714,502	2,350,240	2,824,365
GS-1	268,311	250,927	205,817	174,132	215,663	283,990	289,657	274,723	266,617	152,283	185,730	258,933
GS-3	1,107,671	1,070,587	959,879	855,499	987,137	1,235,548	1,251,510	1,190,776	1,230,628	760,374	856,154	1,070,610
LP-4	632,058	632,517	611,936	563,106	555,322	672,952	739,975	683,570	686,945	523,228	596,984	589,261
LP-5	729,559	774,569	609,278	629,220	614,104	687,962	698,156	704,752	700,899	696,636	642,858	657,890
IS-A	0	0	103,310	86,635	110,389	18,125	100,933	10,690	22,154	95,093	11,056	15,076
GH	260,404	251,852	236,135	173,628	132,759	110,412	121,508	105,295	129,710	87,696	137,772	262,586
SL/AL	65	65	65	65	65	65	65	65	65	19,904	26,348	64
TOTAL PUC	5,274,669	5,235,788	5,086,711	4,259,248	4,028,105	4,453,422	4,748,719	4,562,831	4,256,845	4,049,716	4,807,142	5,678,785

PENNSYLVANIA POWER & LIGHT COMPANY
CONTRIBUTION TO MONTHLY SYSTEM PEAKS
GENERATION LEVEL - IN KW
YEAR ENDED DECEMBER 31, 1988

	5-Jan-88 1900	9-Feb-88 900	22-Mar-88 800	19-Apr-88 900	31-May-88 1700	21-Jun-88 1700	18-Jul-88 1700	11-Aug-88 1700	20-Sep-88 1700	27-Oct-88 900	23-Nov-88 900	12-Dec-88 1900
PUC GROUP												
RS	2,657,998	1,841,571	2,010,351	1,384,916	1,317,583	1,678,361	1,803,232	1,899,579	1,182,881	1,511,055	1,625,113	2,589,723
GS-1	216,221	233,189	177,484	199,431	194,002	210,970	220,498	236,325	156,022	211,612	211,881	225,579
GS-3	898,559	1,007,593	850,704	897,084	960,462	1,000,267	976,805	1,042,724	955,957	979,811	981,056	933,846
LP-4	563,480	616,395	577,882	567,428	597,639	641,594	628,718	660,439	641,074	600,491	629,483	580,093
LP-5	709,643	736,587	605,749	622,485	751,252	786,801	794,462	814,305	755,011	762,997	639,357	701,087
GH	199,114	232,577	209,992	157,362	105,543	99,005	94,657	105,847	100,163	175,616	184,452	175,184
SL/AL	30,652	64	64	64	64	64	64	64	64	65	65	27,343
TOTAL PUC	5,275,667	4,667,976	4,432,226	3,828,770	3,926,545	4,417,062	4,518,436	4,759,283	3,791,172	4,241,647	4,271,407	5,232,855

PENNSYLVANIA POWER & LIGHT COMPANY
CONTRIBUTION TO MONTHLY SYSTEM PEAKS
GENERATION LEVEL - IN KW
YEAR ENDED DECEMBER 31, 1987

	28-Jan-87 800	16-Feb-87 1000	10-Mar-87 900	6-Apr-87 1100	29-May-87 1400	15-Jun-87 1700	22-Jul-87 1700	17-Aug-87 1300	17-Sep-87 1100	30-Oct-87 900	11-Nov-87 1900	30-Dec-87 1900
PUC GROUP												
RS	2,348,610	2,189,650	1,838,170	1,322,212	971,509	1,539,833	1,724,331	1,445,838	842,078	1,417,899	2,055,648	2,483,537
GS-1	198,487	207,460	185,325	266,765	266,330	238,009	216,957	318,848	204,445	178,080	160,693	182,664
GS-3	853,569	840,811	897,384	916,794	1,066,177	908,548	957,265	1,129,556	1,067,940	873,504	730,009	749,161
LP-4	606,992	612,409	601,232	580,237	637,643	595,050	659,227	684,371	661,018	578,170	540,523	465,735
LP-5	591,661	572,173	601,414	602,841	708,989	689,083	800,598	671,172	768,958	741,606	722,448	624,047
GH	267,578	259,558	240,224	171,312	143,352	96,825	100,830	122,470	123,997	165,287	133,565	154,621
SL/AL	12,553	64	64	65	65	65	65	65	65	64	30,977	30,847
TOTAL PUC	4,879,450	4,682,125	4,363,813	3,860,226	3,794,065	4,067,413	4,459,273	4,372,320	3,668,501	3,954,610	4,373,863	4,690,612

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ATTACHMENT 2

PENNSYLVANIA POWER & LIGHT COMPANY
MONTHLY CLASS MAXIMUM DIVERSIFIED DEMANDS
GENERATION LEVEL - IN KW
YEAR ENDED DECEMBER 31, 1996

PUC GROUP	Jan-96	Feb-96	Mar-96	Apr-96	May-96	Jun-96	Jul-96	Aug-96	Sep-96	Oct-96	Nov-96	Dec-96
RS	3,078,533	2,957,741	2,595,393	2,135,956	2,052,888	1,852,550	1,970,178	1,992,541	1,932,017	1,743,095	2,559,179	2,565,891
RTS	257,243	248,421	249,449	185,314	102,629	77,332	77,565	78,758	73,847	93,293	217,091	232,296
GS-1	343,730	374,737	324,645	301,646	314,085	311,536	314,707	358,613	327,614	254,761	312,572	324,917
GS-3	1,383,923	1,445,121	1,319,265	1,327,245	1,531,920	1,527,719	1,507,582	1,554,453	1,561,107	1,360,535	1,304,896	1,326,564
LP-4	669,726	657,247	647,159	696,696	744,584	765,392	781,132	804,132	779,399	697,133	706,482	697,278
IS-P	66,781	69,092	68,454	69,403	70,647	71,167	71,168	72,282	71,505	71,944	72,721	68,771
LP-5	408,895	414,931	401,144	411,624	418,873	437,310	436,424	451,655	454,167	436,603	429,941	418,538
IS-T	287,976	280,833	307,051	301,769	304,958	324,128	321,123	325,544	326,432	323,356	317,980	328,095
LP-6	69,232	73,453	77,292	79,439	86,206	90,236	90,730	90,070	87,968	83,578	82,459	80,611
LPEP	27,109	27,951	28,218	32,662	25,669	24,417	22,517	21,151	30,970	24,619	29,713	28,450
IS-A	96,560	103,815	106,049	103,598	104,175	95,114	98,088	97,062	97,829	97,562	98,381	98,792
GH	196,866	218,094	177,652	140,201	108,242	101,412	79,230	83,243	95,331	92,115	138,653	144,320
SL/AL	26,847	26,777	26,738	26,628	26,750	26,680	26,595	26,626	26,629	26,724	26,564	26,805

PENNSYLVANIA POWER & LIGHT COMPANY
MONTHLY CLASS MAXIMUM DIVERSIFIED DEMANDS.
GENERATION LEVEL - IN KW
YEAR ENDED DECEMBER 31, 1995

PUC GROUP	Jan-95	Feb-95	Mar-95	Apr-95	May-95	Jun-95	Jul-95	Aug-95	Sep-95	Oct-95	Nov-95	Dec-95
RS	2,622,022	2,992,036	2,363,890	2,008,160	1,674,856	2,027,087	2,390,015	2,270,514	1,669,145	1,663,961	2,483,151	2,896,596
RTS	235,853	244,307	190,660	125,336	102,245	81,855	86,041	83,983	65,816	95,655	185,467	250,490
GS-1	336,458	348,217	298,003	299,250	256,736	322,552	339,574	386,007	296,395	271,664	303,958	344,407
GS-3	1,409,267	1,397,653	1,291,916	1,261,865	1,402,744	1,539,841	1,592,242	1,635,765	1,510,613	1,409,379	1,331,473	1,377,477
LP-4	674,179	696,609	668,839	665,364	695,501	787,292	787,047	797,574	754,880	705,180	699,971	685,882
IS-P	64,894	63,379	65,123	66,460	67,603	69,260	70,420	71,216	69,370	68,058	68,964	67,867
LP-5	467,794	476,227	462,245	467,288	490,085	504,275	518,520	532,659	516,539	471,461	413,766	413,164
IS-T	357,669	334,009	348,511	330,868	364,474	367,841	362,214	381,160	368,657	350,809	350,657	286,576
LP-6	0	0	0	0	0	0	0	0	33,988	66,897	78,049	76,429
LPEP	39,059	34,252	35,420	35,894	40,760	27,636	24,327	26,362	23,511	26,072	26,170	24,854
IS-A	99,163	100,596	104,792	97,154	99,740	99,041	98,479	96,190	98,633	102,093	99,760	100,847
GH	212,152	216,727	175,648	152,090	102,678	103,223	94,454	97,569	104,828	106,773	162,696	207,588
SL/AL	26,459	26,550	26,653	26,711	26,560	26,588	26,515	26,598	26,592	26,533	26,577	26,626

PENNSYLVANIA POWER & LIGHT COMPANY
MONTHLY CLASS MAXIMUM DIVERSIFIED DEMANDS
GENERATION LEVEL - IN KW
YEAR ENDED DECEMBER 31, 1994

PUC GROUP	Jan-94	Feb-94	Mar-94	Apr-94	May-94	Jun-94	Jul-94	Aug-94	Sep-94	Oct-94	Nov-94	Dec-94
RS	3,147,833	2,888,333	2,717,379	1,843,290	1,508,132	2,128,537	2,210,800	1,967,324	1,406,329	1,535,447	2,317,140	2,428,841
RTS	257,775	233,964	227,210	117,099	92,674	83,444	90,050	85,549	62,432	87,059	177,043	191,565
GS-1	312,477	319,128	293,950	254,754	355,690	329,621	402,836	352,570	259,273	262,516	287,378	311,060
GS-3	1,338,879	1,323,846	1,305,138	1,232,219	1,317,113	1,522,006	1,414,545	1,423,849	1,415,242	1,267,875	1,273,142	1,330,848
LP-4	665,776	667,267	671,850	662,902	677,760	771,331	756,915	737,244	708,679	687,210	669,164	679,841
IS-P	40,421	41,303	42,210	43,139	46,504	50,510	53,689	64,065	64,167	66,784	65,021	64,481
LP-5	506,719	505,396	507,409	505,506	516,488	571,392	510,065	513,522	486,373	465,942	479,914	472,467
IS-T	257,952	267,583	266,104	281,517	307,370	322,768	339,426	341,594	333,595	357,268	355,416	365,466
LPEP	31,579	37,002	44,257	47,734	34,813	36,654	37,992	44,646	19,859	22,787	19,914	30,071
IS-A	113,715	110,157	115,596	108,248	114,605	134,679	118,598	123,065	109,049	92,041	98,106	103,747
GH	225,653	221,089	195,812	135,024	101,250	123,406	96,896	96,410	108,346	113,061	138,198	174,985
SL/AL	26,567	26,550	26,479	26,411	26,474	26,352	26,369	26,367	26,359	26,419	26,446	26,429

PENNSYLVANIA POWER & LIGHT COMPANY
MONTHLY CLASS MAXIMUM DIVERSIFIED DEMANDS
GENERATION LEVEL - IN KW
YEAR ENDED DECEMBER 31, 1993

PUC GROUP	Jan-93	Feb-93	Mar-93	Apr-93	May-93	Jun-93	Jul-93	Aug-93	Sep-93	Oct-93	Nov-93	Dec-93
RS	2,542,873	2,879,396	2,849,324	1,993,589	1,476,440	1,804,112	2,303,443	2,168,428	1,968,535	1,937,030	2,290,044	3,101,272
GS-1	318,634	345,546	288,987	268,714	351,393	328,318	421,798	349,689	321,298	277,598	277,536	347,187
GS-3	1,252,477	1,274,276	1,211,535	1,101,187	1,303,650	1,393,622	1,366,602	1,413,103	1,370,087	1,190,688	1,179,787	1,209,773
LP-4	675,317	694,780	652,971	634,463	719,504	733,289	734,237	761,958	748,882	644,516	641,908	640,147
IS-P	17,674	18,623	23,036	25,604	29,040	30,227	30,653	33,201	34,759	38,658	41,779	41,113
LP-5	518,358	525,462	527,530	524,199	550,232	555,222	551,235	562,118	552,734	506,608	512,922	501,500
IS-T	230,379	231,606	232,537	236,835	261,425	246,410	258,828	257,191	265,715	282,822	276,211	274,265
LPEP	8,754	43,969	49,250	43,502	41,645	39,771	39,963	44,766	38,798	30,937	35,478	41,313
IS-A	117,016	119,550	117,073	116,280	112,874	109,343	108,071	110,602	111,069	109,616	106,820	115,922
GH	199,160	237,463	219,656	148,658	116,841	110,837	102,864	110,886	119,598	116,954	146,227	186,925
SL/AL	26,462	26,462	26,537	26,566	26,611	26,608	26,587	26,518	26,512	26,401	26,454	26,429

PENNSYLVANIA POWER & LIGHT COMPANY
MONTHLY CLASS MAXIMUM DIVERSIFIED DEMANDS
GENERATION LEVEL - IN KW
YEAR ENDED DECEMBER 31, 1992

PUC GROUP	Jan-92	Feb-92	Mar-92	Apr-92	May-92	Jun-92	Jul-92	Aug-92	Sep-92	Oct-92	Nov-92	Dec-92
RS	2,865,783	2,628,005	2,425,077	2,089,809	1,566,582	1,773,700	2,048,939	1,939,235	1,671,176	1,845,981	2,136,814	2,911,785
GS-1	297,293	299,347	284,172	270,460	308,012	314,812	341,604	338,063	295,597	274,904	265,450	429,822
GS-3	1,253,092	1,218,370	1,186,598	1,130,084	1,173,931	1,337,616	1,341,655	1,384,544	1,410,469	1,162,412	1,160,719	1,194,217
LP-4	657,252	648,302	638,047	638,905	661,167	705,713	748,019	745,032	761,527	668,395	651,722	637,610
IS-P	0	0	0	0	0	0	0	1,731	3,977	6,126	9,764	13,867
LP-5	688,319	720,522	723,036	723,244	742,904	756,504	772,186	579,000	579,010	539,876	530,415	522,182
IS-T	0	0	0	0	0	0	181,147	203,944	252,558	242,488	230,867	228,912
LPEP	5,259	7,523	13,402	9,992	5,043	26,358	13,795	9,165	4,016	4,430	6,906	4,429
IS-A	118,706	120,498	124,868	116,818	113,316	110,424	105,934	111,985	111,224	110,185	112,399	116,184
GH	223,166	236,258	222,867	164,821	119,147	113,124	101,735	108,529	132,941	161,544	163,516	176,185
SL/AL	26,321	26,294	26,318	26,267	26,218	26,251	26,197	26,184	26,440	26,488	26,486	26,388

PENNSYLVANIA POWER & LIGHT COMPANY
MONTHLY CLASS MAXIMUM DIVERSIFIED DEMANDS
GENERATION LEVEL - IN KW
YEAR ENDED DECEMBER 31, 1991

PUC GROUP	Jan-91	Feb-91	Mar-91	Apr-91	May-91	Jun-91	Jul-91	Aug-91	Sep-91	Oct-91	Nov-91	Dec-91
RS	2,670,954	2,603,759	2,126,862	1,837,411	1,905,584	2,008,458	2,165,176	2,085,008	1,986,012	1,713,647	2,355,077	2,633,996
GS-1	321,893	313,479	291,750	275,379	415,827	389,104	366,429	340,059	315,263	313,446	347,636	304,176
GS-3	1,186,396	1,155,557	1,143,441	1,112,912	1,324,981	1,315,689	1,396,369	1,382,776	1,368,835	1,219,719	1,154,592	1,200,774
LP-4	653,907	657,510	612,135	659,485	723,732	726,786	732,813	736,371	762,346	704,110	659,711	671,318
LP-5	700,173	700,715	675,281	681,574	743,025	760,898	771,822	758,887	743,164	738,404	741,521	701,077
LPEP	6,081	5,874	5,874	5,671	5,877	10,310	5,875	9,271	5,153	5,463	12,568	7,835
IS-A	119,885	122,204	117,953	112,741	116,607	112,277	115,094	101,181	112,775	112,170	117,822	117,062
GH	247,134	222,616	193,783	155,225	134,311	127,200	113,125	121,046	136,252	143,126	182,992	221,435
SL/AL	25,892	25,874	25,864	25,850	25,901	25,941	25,899	26,030	25,925	25,941	25,890	26,251

PENNSYLVANIA POWER & LIGHT COMPANY
MONTHLY CLASS MAXIMUM DIVERSIFIED DEMANDS
GENERATION LEVEL - IN KW
YEAR ENDED DECEMBER 31, 1990

PUC GROUP	Jan-90	Feb-90	Mar-90	Apr-90	May-90	Jun-90	Jul-90	Aug-90	Sep-90	Oct-90	Nov-90	Dec-90
RS	2,340,079	2,618,664	2,365,897	1,909,171	1,446,988	1,805,738	1,912,753	1,923,461	1,575,426	1,786,888	2,052,470	2,672,945
GS-1	321,128	326,795	307,462	298,192	284,684	341,434	395,769	343,144	321,793	282,365	289,036	352,471
GS-3	1,125,940	1,158,552	1,100,194	1,164,289	1,129,862	1,226,085	1,280,963	1,293,347	1,266,392	1,218,657	1,116,158	1,188,024
LP-4	593,430	650,957	650,229	677,859	679,396	707,059	718,633	708,400	713,201	685,512	616,111	632,694
LP-5	724,292	716,910	725,863	746,582	747,845	744,772	737,964	765,112	759,705	776,817	743,519	722,011
IS-A	111,685	115,782	118,178	111,824	113,833	108,887	110,872	111,026	108,630	113,616	115,470	117,400
GH	204,484	262,802	221,673	167,926	121,116	114,617	112,070	123,824	129,053	143,748	189,948	191,026
SL/AL	26,135	26,056	25,972	25,929	25,915	25,843	25,903	25,888	25,887	25,811	25,790	25,800

PENNSYLVANIA POWER & LIGHT COMPANY
MONTHLY CLASS MAXIMUM DIVERSIFIED DEMANDS
GENERATION LEVEL - IN KW
YEAR ENDED DECEMBER 31, 1989

PUC GROUP	Jan-89	Feb-89	Mar-89	Apr-89	May-89	Jun-89	Jul-89	Aug-89	Sep-89	Oct-89	Nov-89	Dec-89
RS	2,636,332	2,423,594	2,424,949	1,777,380	1,661,819	1,882,227	2,088,485	1,961,306	1,848,560	1,714,502	2,350,240	3,044,137
GS-1	291,804	303,012	272,759	243,520	275,130	304,292	331,581	289,319	281,129	288,476	298,772	351,777
GS-3	1,160,707	1,141,869	1,118,447	1,070,966	1,138,264	1,287,416	1,251,510	1,255,386	1,230,628	1,096,020	1,119,359	1,226,485
LP-4	638,937	647,502	634,951	609,531	657,500	692,958	739,975	705,752	697,168	650,378	643,688	646,141
LP-5	797,712	781,722	691,348	687,887	679,788	739,197	746,423	715,453	762,733	728,255	736,309	727,126
IS-A	0	186,921	166,981	156,401	144,609	125,245	117,897	115,031	121,925	113,726	117,359	115,272
GH	260,404	253,911	241,553	176,935	134,811	130,672	121,508	119,611	129,710	147,545	210,511	262,586
SL/AL	27,498	27,456	27,240	27,147	27,088	26,998	26,985	26,901	26,776	26,518	26,348	26,291

PENNSYLVANIA POWER & LIGHT COMPANY
MONTHLY CLASS MAXIMUM DIVERSIFIED DEMANDS
GENERATION LEVEL - IN KW
YEAR ENDED DECEMBER 31, 1988

PUC GROUP	Jan-88	Feb-88	Mar-88	Apr-88	May-88	Jun-88	Jul-88	Aug-88	Sep-88	Oct-88	Nov-88	Dec-88
RS	2,657,998	2,440,726	2,040,377	1,579,112	1,474,352	1,820,212	1,993,645	2,119,847	1,328,461	1,793,659	2,082,046	2,599,098
GS-1	285,179	264,388	244,828	231,662	236,092	298,412	318,812	323,127	308,799	246,793	257,629	298,822
GS-3	1,144,915	1,059,735	1,042,742	975,835	1,148,170	1,250,060	1,233,348	1,237,172	1,162,876	1,030,393	1,041,062	1,138,619
LP-4	642,590	616,519	607,307	597,323	642,677	720,737	695,958	717,621	698,911	621,821	629,483	640,075
LP-5	788,973	767,684	802,075	779,336	799,227	800,203	814,177	826,237	836,452	784,682	791,104	763,711
GH	286,289	232,577	218,321	165,027	139,750	138,123	122,584	130,958	130,326	180,331	188,715	259,080
SL/AL	30,652	30,308	29,973	29,332	29,059	28,862	28,600	28,263	27,896	27,789	27,987	27,343

PENNSYLVANIA POWER & LIGHT COMPANY
MONTHLY CLASS MAXIMUM DIVERSIFIED DEMANDS
GENERATION LEVEL - IN KW
YEAR ENDED DECEMBER 31, 1987

PUC GROUP	Jan-87	Feb-87	Mar-87	Apr-87	May-87	Jun-87	Jul-87	Aug-87	Sep-87	Oct-87	Nov-87	Dec-87
RS	2,392,417	2,299,613	2,005,000	1,585,490	1,610,715	1,625,779	1,871,288	1,921,997	1,369,911	1,592,265	2,334,650	2,483,537
GS-1	272,950	279,929	272,733	275,538	272,133	288,339	312,552	318,848	223,612	241,511	272,882	248,731
GS-3	1,017,441	966,988	947,130	938,234	1,066,177	1,113,659	1,193,724	1,135,330	1,104,654	977,286	1,007,566	1,086,230
LP-4	629,468	657,084	610,977	594,959	637,643	697,577	716,262	689,137	677,764	612,928	635,119	617,693
LP-5	711,456	725,156	698,397	705,623	740,505	779,145	800,598	788,625	794,060	805,015	813,650	768,732
GH	276,162	261,198	246,946	179,394	143,352	145,199	129,127	126,451	132,295	165,287	220,772	225,572
SL/AL	31,285	31,306	31,290	31,495	31,481	31,444	31,347	31,331	31,257	31,079	30,977	30,847

RP - I.3.

ATTACHMENT 3

PENNSYLVANIA POWER & LIGHT COMPANY
NUMBER OF CUSTOMERS
YEAR ENDED DECEMBER 31, 1996

	Jan-96	Feb-96	Mar-96	Apr-96	May-96	Jun-96	Jul-96	Aug-96	Sep-96	Oct-96	Nov-96	Dec-96
PUC GROUP												
RS	1,065,662	1,065,515	1,066,422	1,067,154	1,064,827	1,066,252	1,065,162	1,065,475	1,066,973	1,069,530	1,069,225	1,072,139
RTS	14,592	14,586	14,624	14,612	14,601	14,600	14,581	14,592	14,580	14,613	14,607	14,575
GS-1	121,911	121,921	121,706	122,300	122,098	122,266	122,364	122,441	122,703	122,796	123,125	123,221
GS-3	19,194	19,350	19,738	19,801	19,655	19,805	19,972	19,982	20,069	19,924	19,964	20,210
LP-4	829	820	833	829	827	828	828	830	824	826	828	822
IS-P	31	32	32	34	32	32	32	32	32	32	32	32
LP-5	97	97	98	98	96	96	95	96	98	98	103	97
IS-T	29	29	28	28	27	29	31	31	30	31	32	30
LP-6	4	5	5	5	5	5	5	5	5	5	5	5
LPEP	1	1	1	1	1	1	1	1	1	1	1	1
IS-A	1	1	1	1	1	1	1	1	1	1	1	1
GH	4,481	4,462	4,384	4,362	4,334	4,331	4,248	4,191	4,167	4,152	4,043	4,026
SL/AL	1,049	1,053	1,058	1,060	1,060	1,066	1,071	1,072	1,075	1,078	1,080	1,081
TOTAL PUC	1,227,881	1,227,872	1,228,930	1,230,285	1,227,564	1,229,312	1,228,391	1,228,749	1,230,558	1,233,087	1,233,046	1,236,240

PENNSYLVANIA POWER & LIGHT COMPANY
NUMBER OF CUSTOMERS
YEAR ENDED DECEMBER 31, 1995

PUC GROUP	Jan-95	Feb-95	Mar-95	Apr-95	May-95	Jun-95	Jul-95	Aug-95	Sep-95	Oct-95	Nov-95	Dec-95
RS	1,057,249	1,056,377	1,056,064	1,057,329	1,057,285	1,056,326	1,057,640	1,061,349	1,062,114	1,063,331	1,062,056	1,064,005
RTS	14,310	14,357	14,377	14,428	14,420	14,412	14,442	14,510	14,513	14,509	14,534	14,575
GS-1	119,912	119,893	120,045	120,453	120,750	120,805	120,945	121,397	121,629	121,907	121,834	121,785
GS-3	18,878	18,914	18,946	18,777	18,805	18,897	19,060	19,286	19,094	18,968	19,010	19,181
LP-4	815	813	820	803	819	810	819	815	816	815	835	817
IS-P	31	31	31	32	33	33	33	33	32	32	32	33
LP-5	101	102	100	99	100	100	101	99	100	103	99	98
IS-T	28	27	28	27	32	26	28	27	29	31	27	28
LP-6	0	0	0	0	0	0	0	0	0	0	4	6
LPEP	1	1	1	1	1	1	1	1	1	1	1	1
IS-A	1	1	1	1	1	1	1	1	1	1	1	1
GH	4,533	4,508	4,502	4,523	4,503	4,484	4,497	4,499	4,487	4,482	4,483	4,479
SL/AL	1,010	1,015	1,021	1,025	1,028	1,029	1,034	1,036	1,041	988	1,102	1,047
TOTAL PUC	1,216,869	1,216,039	1,215,936	1,217,498	1,217,777	1,216,924	1,218,601	1,223,053	1,223,857	1,225,168	1,224,018	1,226,056

PENNSYLVANIA POWER & LIGHT COMPANY
NUMBER OF CUSTOMERS
YEAR ENDED DECEMBER 31, 1994

	Jan-94	Feb-94	Mar-94	Apr-94	May-94	Jun-94	Jul-94	Aug-94	Sep-94	Oct-94	Nov-94	Dec-94
PUC GROUP												
RS	1,046,895	1,046,494	1,047,339	1,046,889	1,048,103	1,045,930	1,046,917	1,047,600	1,049,213	1,050,897	1,052,261	1,053,889
RTS	13,806	13,885	14,020	13,999	14,006	13,964	14,023	14,025	14,059	14,110	14,201	14,232
GS-1	118,707	118,601	118,784	118,754	119,454	119,206	119,120	119,373	119,249	119,427	119,693	119,671
GS-3	18,232	18,292	18,311	18,218	18,163	18,251	18,472	18,500	18,566	18,528	18,617	18,701
LP-4	810	807	810	808	806	812	810	802	801	803	817	815
IS-P	20	19	22	21	21	22	24	28	31	31	31	31
LP-5	107	108	107	108	107	106	103	101	100	100	100	99
IS-T	19	19	19	19	20	21	24	26	27	27	27	26
LPEP	1	1	1	1	1	1	1	1	1	1	1	1
IS-A	1	1	1	1	1	1	1	1	1	1	1	1
GH	4,627	4,611	4,614	4,610	4,610	4,595	4,596	4,570	4,565	4,566	4,534	4,525
SL/AL	941	947	957	959	966	968	973	984	993	997	1,001	1,003
TOTAL PUC	1,204,166	1,203,785	1,204,985	1,204,387	1,206,258	1,203,877	1,205,064	1,206,011	1,207,606	1,209,488	1,211,284	1,212,994

PENNSYLVANIA POWER & LIGHT COMPANY
NUMBER OF CUSTOMERS
YEAR ENDED DECEMBER 31, 1993

PUC GROUP	Jan-93	Feb-93	Mar-93	Apr-93	May-93	Jun-93	Jul-93	Aug-93	Sep-93	Oct-93	Nov-93	Dec-93
RS	1,047,787	1,049,159	1,049,985	1,048,707	1,048,122	1,047,723	1,049,535	1,049,881	1,052,129	1,053,674	1,057,104	1,059,690
GS-1	117,182	117,282	117,435	117,482	117,653	117,800	117,784	118,007	117,932	118,401	118,702	118,753
GS-3	17,627	17,785	17,688	17,592	17,574	17,593	17,869	17,932	18,049	17,960	17,991	18,151
LP-4	805	820	812	802	811	810	809	815	808	812	810	810
IS-P	10	10	12	13	14	15	16	16	17	18	19	20
LP-5	113	113	113	114	112	111	112	112	110	108	108	106
IS-T	14	13	13	14	14	14	14	15	16	18	18	18
LPEP	1	1	1	1	1	1	1	1	1	1	1	1
IS-A	1	1	1	1	1	1	1	1	1	1	1	1
GH	4,685	4,704	4,694	4,709	4,695	4,679	4,686	4,689	4,649	4,627	4,630	4,627
SL/AL	887	896	904	902	911	916	921	925	930	931	932	935
TOTAL PUC	1,189,112	1,190,784	1,191,658	1,190,337	1,189,908	1,189,663	1,191,748	1,192,394	1,194,642	1,196,551	1,200,316	1,203,112

PENNSYLVANIA POWER & LIGHT COMPANY
NUMBER OF CUSTOMERS
YEAR ENDED DECEMBER 31, 1992

PUC GROUP	Jan-92	Feb-92	Mar-92	Apr-92	May-92	Jun-92	Jul-92	Aug-92	Sep-92	Oct-92	Nov-92	Dec-92
RS	1,036,262	1,036,466	1,036,798	1,036,071	1,034,996	1,036,054	1,037,604	1,038,427	1,039,621	1,042,042	1,043,279	1,045,480
GS-1	116,048	116,276	116,262	116,360	116,613	116,856	116,761	116,734	116,795	116,989	117,122	117,109
GS-3	17,235	17,331	17,300	17,205	17,182	17,256	17,378	17,487	17,533	17,415	17,488	17,555
LP-4	808	811	806	812	811	819	818	811	833	806	817	813
IS-P	0	0	0	0	0	0	0	0	2	4	4	6
LP-5	127	127	127	124	129	128	126	117	115	115	115	113
IS-T	0	0	0	0	0	0	0	9	10	10	12	13
LPEP	1	1	1	1	1	1	1	1	1	1	1	1
IS-A	1	1	1	1	1	1	1	1	1	1	1	1
GH	4,814	4,808	4,783	4,773	4,794	4,784	4,761	4,732	4,738	4,723	4,715	4,694
SL/AL	818	829	827	837	842	838	842	845	856	864	870	870
TOTAL PUC	1,176,114	1,176,650	1,176,905	1,176,184	1,175,369	1,176,737	1,178,292	1,179,164	1,180,505	1,182,970	1,184,424	1,186,655

PENNSYLVANIA POWER & LIGHT COMPANY
NUMBER OF CUSTOMERS
YEAR ENDED DECEMBER 31, 1991

PUC GROUP	Jan-91	Feb-91	Mar-91	Apr-91	May-91	Jun-91	Jul-91	Aug-91	Sep-91	Oct-91	Nov-91	Dec-91
RS	1,024,994	1,026,534	1,027,082	1,025,879	1,026,205	1,025,793	1,026,641	1,026,683	1,028,642	1,030,920	1,031,734	1,033,872
GS-1	114,756	115,149	115,293	115,141	115,554	115,594	115,664	115,746	116,045	116,154	116,086	116,092
GS-3	16,572	16,591	16,537	16,495	16,483	16,552	16,637	16,658	16,722	16,783	16,921	17,142
LP-4	800	803	798	800	797	797	798	800	805	799	802	799
LP-5	126	123	123	125	125	126	126	126	126	125	128	126
LPEP	1	1	1	1	1	1	1	1	1	1	1	1
IS-A	1	1	1	1	1	1	1	1	1	1	1	1
GH	4,901	4,902	4,897	4,874	4,879	4,849	4,847	4,851	4,848	4,859	4,835	4,806
SL/AL	786	788	791	798	795	804	804	802	810	811	813	812
TOTAL PUC	1,162,937	1,164,892	1,165,523	1,164,114	1,164,840	1,164,517	1,165,519	1,165,668	1,168,000	1,170,453	1,171,321	1,173,651

PENNSYLVANIA POWER & LIGHT COMPANY
NUMBER OF CUSTOMERS
YEAR ENDED DECEMBER 31, 1990

PUC GROUP	Jan-90	Feb-90	Mar-90	Apr-90	May-90	Jun-90	Jul-90	Aug-90	Sep-90	Oct-90	Nov-90	Dec-90
RS	1,011,720	1,012,025	1,012,525	1,012,641	1,014,212	1,012,670	1,013,768	1,015,371	1,016,998	1,019,402	1,020,844	1,023,273
GS-1	112,801	113,301	113,395	113,620	114,063	114,303	114,194	114,223	114,299	114,443	114,606	114,841
GS-3	16,130	15,886	15,960	15,870	15,870	15,946	16,160	16,371	16,393	16,347	16,323	16,462
LP-4	790	786	785	790	792	792	793	790	795	794	797	801
LP-5	121	122	122	122	123	122	121	124	124	123	125	124
IS-A	1	1	1	1	1	1	1	1	1	1	1	1
GH	5,008	5,006	4,941	4,982	4,981	4,963	4,964	4,940	4,940	4,935	4,921	4,915
SL/AL	786	791	789	791	795	789	788	786	785	786	790	789
TOTAL PUC	1,147,357	1,147,918	1,148,518	1,148,817	1,150,837	1,149,586	1,150,789	1,152,606	1,154,335	1,156,831	1,158,407	1,161,206

PENNSYLVANIA POWER & LIGHT COMPANY
NUMBER OF CUSTOMERS
YEAR ENDED DECEMBER 31, 1989

PUC GROUP	Jan-89	Feb-89	Mar-89	Apr-89	May-89	Jun-89	Jul-89	Aug-89	Sep-89	Oct-89	Nov-89	Dec-89
RS	994,174	995,100	996,460	996,446	996,959	997,016	999,221	999,767	1,001,684	1,003,826	1,005,483	1,008,186
GS-1	110,303	110,675	110,708	111,010	111,470	111,675	111,841	112,083	112,160	112,710	112,839	112,799
GS-3	15,442	15,356	15,517	15,395	15,330	15,465	15,615	15,610	15,649	15,561	15,599	15,867
LP-4	790	789	789	790	795	796	793	791	792	792	787	790
LP-5	118	117	118	118	117	120	117	119	120	120	120	120
IS-A	0	1	1	1	1	1	1	1	1	1	1	1
GH	5,110	5,084	5,076	5,060	5,054	5,062	5,047	5,010	5,015	5,023	5,012	5,018
SL/AL	811	796	798	792	792	801	798	797	804	792	790	786
TOTAL PUC	1,126,748	1,127,918	1,129,467	1,129,612	1,130,518	1,130,936	1,133,433	1,134,178	1,136,225	1,138,825	1,140,631	1,143,567

PENNSYLVANIA POWER & LIGHT COMPANY
NUMBER OF CUSTOMERS
YEAR ENDED DECEMBER 31, 1988

	Jan-88	Feb-88	Mar-88	Apr-88	May-88	Jun-88	Jul-88	Aug-88	Sep-88	Oct-88	Nov-88	Dec-88
PUC GROUP												
RS	973,378	973,791	974,535	974,547	975,101	995,145	976,850	981,646	983,785	967,988	1,037,697	940,190
GS-1	107,701	107,803	107,837	108,051	108,390	110,889	108,400	109,289	109,143	107,670	115,306	104,649
GS-3	14,616	14,675	14,612	14,533	14,469	15,018	14,848	15,150	14,960	14,655	15,843	14,383
LP-4	770	768	773	773	776	788	779	784	781	780	797	767
LP-5	110	110	110	109	109	111	112	113	121	119	118	118
GH	5,196	5,204	5,177	5,171	5,164	5,270	5,135	5,130	5,141	4,994	5,372	4,835
SL/AL	873	878	876	873	862	862	849	844	835	839	826	814
TOTAL PUC	1,102,644	1,103,229	1,103,920	1,104,057	1,104,871	1,128,083	1,106,973	1,112,956	1,114,766	1,097,045	1,175,959	1,065,756

PENNSYLVANIA POWER & LIGHT COMPANY
NUMBER OF CUSTOMERS
YEAR ENDED DECEMBER 31, 1987

	Jan-87	Feb-87	Mar-87	Apr-87	May-87	Jun-87	Jul-87	Aug-87	Sep-87	Oct-87	Nov-87	Dec-87
PUC GROUP												
RS	951,228	951,145	953,915	954,008	953,014	952,804	955,396	957,215	959,471	963,712	965,337	968,632
GS-1	105,436	105,370	105,717	105,907	106,221	106,322	106,320	106,639	106,791	107,520	107,450	107,621
GS-3	13,571	13,707	13,744	13,648	13,617	13,851	14,070	14,225	14,090	14,120	14,138	14,291
LP-4	757	759	764	764	763	765	763	766	762	771	770	766
LP-5	100	100	101	104	104	104	104	109	109	109	110	110
GH	5,315	5,308	5,318	5,295	5,286	5,254	5,265	5,239	5,239	5,242	5,243	5,209
SL/AL	822	826	832	834	832	835	836	844	850	859	868	868
TOTAL PUC	1,077,229	1,077,215	1,080,391	1,080,560	1,079,837	1,079,935	1,082,754	1,085,037	1,087,312	1,092,333	1,093,916	1,097,497

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ATTACHMENT 4

PENNSYLVANIA POWER & LIGHT COMPANY
MONTHLY ENERGY
GENERATION LEVEL IN MWH
YEAR ENDED DECEMBER 31, 1996

	Jan-96	Feb-96	Mar-96	Apr-96	May-96	Jun-96	Jul-96	Aug-96	Sep-96	Oct-96	Nov-96	Dec-96
PUC GROUP												
RS	1,527,197	1,409,504	1,247,145	1,055,315	803,281	810,376	885,333	850,546	874,227	786,736	918,742	1,243,460
RTS	68,978	64,908	53,885	42,419	26,741	23,292	22,948	21,957	23,039	23,365	32,804	49,810
GS-1	155,891	153,086	140,183	126,166	111,432	118,404	131,155	129,675	132,928	117,287	121,390	142,962
GS-3	665,816	679,503	669,077	626,093	593,000	633,922	671,161	662,366	685,161	639,807	630,034	677,586
LP-4	367,691	379,706	378,102	365,791	365,001	385,283	408,230	403,928	402,942	392,199	384,650	389,936
IS-P	31,546	37,510	39,126	38,614	38,600	40,687	38,235	38,046	40,831	39,937	41,860	37,898
LP-5	231,640	247,437	247,141	244,207	245,035	256,810	258,030	265,882	269,352	265,550	272,891	256,163
IS-T	175,254	162,903	187,998	186,549	182,776	195,495	198,731	200,251	196,823	188,460	212,464	184,798
LP-6	34,139	39,522	45,303	45,312	47,539	49,634	57,150	53,009	52,808	51,242	47,927	49,157
LPEP	5,836	7,180	6,727	6,046	6,653	5,515	3,728	4,381	3,947	5,450	6,552	7,931
IS-A	28,067	52,455	50,595	53,248	50,010	42,925	48,880	28,689	49,734	52,742	56,745	52,451
GH	81,565	81,159	69,246	53,139	37,555	34,428	29,712	28,421	31,648	32,066	39,438	54,730
SL/AL	11,769	9,982	9,921	8,337	8,091	7,137	7,710	8,663	9,341	10,677	11,172	12,907
TOTAL PUC	3,385,389	3,324,855	3,144,449	2,851,236	2,515,714	2,603,908	2,761,003	2,695,814	2,772,781	2,605,518	2,776,669	3,159,789

PENNSYLVANIA POWER & LIGHT COMPANY
MONTHLY ENERGY
GENERATION LEVEL IN MWH
YEAR ENDED DECEMBER 31, 1995

	Jan-95	Feb-95	Mar-95	Apr-95	May-95	Jun-95	Jul-95	Aug-95	Sep-95	Oct-95	Nov-95	Dec-95
PUC GROUP												
RS	1,286,699	1,224,503	1,195,455	942,261	808,573	756,530	898,026	1,031,257	866,645	702,444	886,321	1,268,202
RTS	53,235	53,839	50,180	35,722	26,186	20,925	22,756	25,371	22,249	20,094	31,713	52,765
GS-1	136,570	135,315	136,683	118,260	114,765	118,653	131,499	142,506	134,443	112,857	117,840	141,474
GS-3	633,708	614,023	639,867	582,268	596,727	617,551	652,084	688,959	663,900	598,643	595,571	637,111
LP-4	354,800	358,172	368,540	347,386	371,659	372,513	386,198	402,221	399,972	361,300	365,925	370,600
IS-P	34,440	35,443	37,645	37,460	38,737	39,537	37,042	37,838	38,009	36,904	37,497	39,680
LP-5	275,725	261,004	281,494	271,612	285,698	289,031	293,871	304,413	291,064	294,314	241,966	230,374
IS-T	209,674	192,606	197,109	179,499	253,503	216,127	207,161	212,680	201,484	251,582	173,296	181,888
LP-6	0	0	0	0	0	0	0	0	0	0	57,678	50,496
LPEP	9,662	13,342	11,463	14,152	11,200	10,021	8,014	6,452	5,118	5,149	7,498	6,643
IS-A	33,224	43,736	37,911	45,272	47,846	47,665	36,202	40,845	44,726	46,239	55,203	45,569
GH	71,165	75,308	70,898	52,056	42,399	36,677	35,719	37,463	38,255	35,781	46,437	68,517
SL/AL	11,599	9,932	9,894	8,403	8,076	7,170	7,714	8,672	9,320	9,884	12,183	11,726
TOTAL PUC	3,110,501	3,017,223	3,037,139	2,634,351	2,605,369	2,532,400	2,716,286	2,938,677	2,715,185	2,475,191	2,629,128	3,105,045

PENNSYLVANIA POWER & LIGHT COMPANY
MONTHLY ENERGY
GENERATION LEVEL IN MWH
YEAR ENDED DECEMBER 31, 1994

	Jan-94	Feb-94	Mar-94	Apr-94	May-94	Jun-94	Jul-94	Aug-94	Sep-94	Oct-94	Nov-94	Dec-94
PUC GROUP												
RS	1,521,347	1,461,582	1,289,485	986,444	712,657	766,679	955,724	878,898	760,127	746,286	800,807	1,074,031
RTS	61,433	66,555	56,482	37,850	22,595	21,211	23,414	21,472	19,695	21,929	26,592	41,151
GS-1	151,045	151,793	143,718	121,327	109,594	116,865	136,339	130,659	119,203	111,921	108,697	125,684
GS-3	616,441	643,971	634,773	575,633	541,842	590,208	646,314	626,895	613,713	592,353	562,745	596,629
LP-4	360,996	368,160	370,229	358,534	347,222	382,114	394,919	384,855	380,094	368,510	349,192	361,175
IS-P	21,752	19,308	25,215	23,396	23,150	26,255	26,049	29,894	36,837	38,510	36,591	35,982
LP-5	295,899	292,209	303,304	302,649	296,898	314,473	306,196	298,245	283,809	292,426	282,346	272,952
IS-T	144,970	148,089	159,513	159,653	178,050	180,332	192,922	212,177	200,017	221,296	210,360	203,192
LPEP	15,040	11,126	12,304	20,073	16,394	12,071	15,056	14,053	10,636	8,857	7,550	6,947
IS-A	25,582	43,662	45,622	42,735	35,963	37,239	22,426	30,096	32,766	33,743	35,430	36,021
GH	89,853	95,315	81,221	56,890	40,083	39,761	39,927	37,036	36,192	39,501	41,505	58,139
SL/AL	11,643	9,874	9,821	8,247	8,034	7,071	7,619	8,590	9,213	10,565	11,069	11,946
TOTAL PUC	3,316,001	3,311,644	3,131,687	2,693,431	2,332,482	2,494,279	2,766,905	2,672,870	2,502,302	2,485,897	2,472,884	2,823,849

PENNSYLVANIA POWER & LIGHT COMPANY
MONTHLY ENERGY
GENERATION LEVEL IN MWH
YEAR ENDED DECEMBER 31, 1993

	Jan-93	Feb-93	Mar-93	Apr-93	May-93	Jun-93	Jul-93	Aug-93	Sep-93	Oct-93	Nov-93	Dec-93
PUC GROUP												
RS	1,336,077	1,327,197	1,329,421	1,039,073	749,316	743,357	932,020	858,409	875,617	763,226	905,852	1,152,283
GS-1	138,189	140,375	139,868	122,223	107,826	114,162	133,246	128,877	128,560	107,235	112,792	128,074
GS-3	589,913	604,974	598,352	551,993	535,696	559,730	617,953	599,538	619,410	545,280	543,913	583,228
LP-4	350,671	378,800	361,944	348,898	358,834	369,982	385,542	386,035	395,093	359,023	352,009	360,956
IS-P	8,170	8,500	10,222	12,089	13,258	15,938	15,863	15,855	18,010	19,726	22,572	21,898
LP-5	290,996	310,591	313,677	311,549	308,911	330,130	324,676	325,324	330,692	298,414	299,671	299,454
IS-T	127,777	126,038	140,728	132,204	135,650	146,950	143,074	156,172	153,243	163,432	167,716	158,346
LPEP	847	833	9,854	17,143	15,250	13,456	15,510	14,157	14,797	13,378	9,647	13,803
IS-A	31,338	37,132	37,484	33,997	35,944	38,555	37,976	30,616	37,018	29,611	37,247	31,108
GH	80,074	86,421	86,703	61,133	43,432	40,084	40,596	39,400	41,077	40,052	49,609	63,545
SL/AL	11,635	9,819	9,764	8,363	8,104	7,236	7,740	8,658	9,252	10,545	11,126	12,012
TOTAL PUC	2,965,687	3,030,680	3,038,017	2,638,665	2,312,221	2,379,580	2,654,196	2,563,041	2,622,769	2,349,922	2,512,154	2,824,707

PENNSYLVANIA POWER & LIGHT COMPANY
MONTHLY ENERGY
GENERATION LEVEL IN MWH
YEAR ENDED DECEMBER 31, 1992

PUC GROUP	Jan-92	Feb-92	Mar-92	Apr-92	May-92	Jun-92	Jul-92	Aug-92	Sep-92	Oct-92	Nov-92	Dec-92
RS	1,306,125	1,286,261	1,162,760	1,042,440	796,170	719,879	784,715	797,914	762,855	753,309	962,628	1,181,592
GS-1	136,532	135,997	130,422	120,096	107,127	109,821	117,367	122,302	117,332	105,966	118,638	130,410
GS-3	576,832	582,188	571,685	542,818	514,325	539,141	564,609	589,753	577,055	531,466	556,878	569,345
LP-4	347,628	364,463	356,210	345,397	343,823	356,649	366,669	381,189	380,780	346,839	366,616	363,554
IS-P	0	0	0	0	0	0	0	0	821	2,673	2,961	4,703
LP-5	413,405	429,587	442,685	434,223	437,687	455,695	456,629	347,951	332,465	317,488	328,660	300,848
IS-T	0	0	0	0	0	0	0	123,860	139,351	138,990	140,672	135,314
LPEP	867	924	846	1,079	753	719	529	667	694	570	748	705
IS-A	36,522	39,192	31,886	38,229	30,526	18,852	26,911	19,205	26,457	27,435	27,767	31,899
GH	84,904	88,257	77,843	68,453	45,745	40,751	38,386	38,089	39,483	42,743	58,612	67,757
SL/AL	11,545	9,782	9,854	8,254	7,928	7,101	7,585	8,469	10,052	10,799	11,034	11,946
TOTAL PUC	2,914,360	2,936,651	2,784,191	2,600,989	2,284,084	2,248,608	2,363,400	2,429,399	2,387,345	2,278,278	2,575,214	2,798,073

PENNSYLVANIA POWER & LIGHT COMPANY
MONTHLY ENERGY
GENERATION LEVEL IN MWH
YEAR ENDED DECEMBER 31, 1991

	Jan-91	Feb-91	Mar-91	Apr-91	May-91	Jun-91	Jul-91	Aug-91	Sep-91	Oct-91	Nov-91	Dec-91
PUC GROUP												
RS	1,303,444	1,185,588	1,072,273	960,078	781,810	800,670	857,406	845,556	807,502	757,139	851,404	1,110,465
GS-1	137,055	131,183	122,810	117,022	110,777	121,285	127,987	128,230	125,375	111,273	109,459	126,260
GS-3	570,689	550,040	522,942	519,237	523,208	561,693	568,713	569,214	577,117	542,638	513,952	556,910
LP-4	339,548	350,070	324,588	334,746	351,848	359,361	357,273	360,375	370,696	358,247	333,703	348,577
LP-5	408,176	409,109	390,646	411,833	433,413	437,836	445,425	441,207	458,639	451,160	430,988	431,850
LPEP	979	914	944	932	965	990	805	932	801	820	818	859
IS-A	29,991	40,008	36,040	38,302	34,374	19,548	26,477	6,081	27,208	33,860	39,547	28,588
GH	88,471	86,755	74,746	62,114	48,835	46,131	42,204	41,854	44,270	46,383	52,342	70,421
SL/AL	10,827	9,617	9,544	8,125	7,882	7,008	7,436	8,438	9,069	10,343	10,782	12,053
TOTAL PUC	2,889,180	2,763,284	2,554,533	2,452,389	2,293,112	2,354,522	2,433,726	2,401,887	2,420,677	2,311,863	2,342,995	2,685,983

PENNSYLVANIA POWER & LIGHT COMPANY
MONTHLY ENERGY
GENERATION LEVEL IN MWH
YEAR ENDED DECEMBER 31, 1990

	Jan-90	Feb-90	Mar-90	Apr-90	May-90	Jun-90	Jul-90	Aug-90	Sep-90	Oct-90	Nov-90	Dec-90
PUC GROUP												
RS	1,447,922	1,044,027	1,089,484	943,145	754,793	711,323	794,576	844,691	782,071	716,868	826,648	1,061,218
GS-1	149,877	121,726	127,000	116,453	107,596	107,593	120,891	128,552	118,645	108,374	108,286	122,742
GS-3	596,968	508,376	540,168	511,403	496,980	511,391	543,156	579,978	559,157	533,845	506,687	521,506
LP-4	350,508	327,287	351,118	334,635	340,155	350,505	355,227	371,690	362,948	356,972	337,188	336,026
LP-5	436,762	403,174	429,694	432,168	433,116	436,730	442,790	470,268	447,862	470,390	445,132	419,960
IS-A	25,362	35,698	36,224	31,705	30,211	21,504	24,865	26,834	18,628	34,087	39,432	34,654
GH	109,793	78,032	81,037	66,188	49,693	43,687	41,415	42,970	43,772	46,091	53,525	69,837
SL/AL	10,866	9,642	9,547	8,159	7,841	6,947	7,526	8,446	9,049	10,281	10,786	11,671
TOTAL PUC	3,128,058	2,527,962	2,664,272	2,443,856	2,220,385	2,189,680	2,330,446	2,473,429	2,342,132	2,276,908	2,327,684	2,577,614

PENNSYLVANIA POWER & LIGHT COMPANY
MONTHLY ENERGY
GENERATION LEVEL IN MWH
YEAR ENDED DECEMBER 31, 1989

	Jan-89	Feb-89	Mar-89	Apr-89	May-89	Jun-89	Jul-89	Aug-89	Sep-89	Oct-89	Nov-89	Dec-89
PUC GROUP												
RS	1,286,583	1,077,270	1,170,079	920,439	779,770	713,269	786,871	778,165	756,185	712,119	809,793	1,230,499
GS-1	134,923	120,567	128,381	112,088	104,955	108,749	118,274	118,503	122,093	101,124	108,018	133,479
GS-3	547,912	504,280	545,254	498,548	494,787	520,795	529,204	535,139	543,761	496,458	496,848	547,583
LP-4	346,534	338,188	353,628	333,834	350,347	354,314	352,251	360,388	365,700	340,225	341,325	353,796
LP-5	455,991	390,924	429,534	397,433	421,727	419,156	436,910	432,638	436,990	448,079	439,107	429,517
IS-A	0	56,158	48,902	50,005	54,539	40,483	28,144	6,300	25,955	27,739	27,131	31,914
GH	100,532	89,012	95,123	66,965	53,931	45,849	43,396	41,340	44,407	46,111	56,081	90,196
SL/AL	12,101	9,841	9,970	8,355	8,215	7,240	7,821	8,703	9,350	10,418	10,922	11,812
TOTAL PUC	2,884,576	2,586,240	2,780,871	2,387,667	2,268,271	2,209,855	2,302,871	2,281,176	2,304,441	2,182,273	2,289,225	2,828,796

PENNSYLVANIA POWER & LIGHT COMPANY
MONTHLY ENERGY
GENERATION LEVEL IN MWH
YEAR ENDED DECEMBER 31, 1988

	Jan-88	Feb-88	Mar-88	Apr-88	May-88	Jun-88	Jul-88	Aug-88	Sep-88	Oct-88	Nov-88	Dec-88
PUC GROUP												
RS	1,278,476	1,176,299	1,060,380	850,349	700,780	682,697	785,577	862,936	713,543	655,396	929,441	1,013,835
GS-1	129,678	126,669	117,519	103,986	94,227	103,931	114,886	122,436	107,278	94,970	115,754	114,274
GS-3	526,879	524,107	500,992	463,157	433,780	486,916	503,117	532,876	500,585	459,377	522,160	483,839
LP-4	340,468	358,500	347,209	331,529	322,692	341,974	343,703	362,109	356,750	331,340	355,109	338,437
LP-5	447,850	466,806	461,390	441,690	453,046	467,123	455,353	479,548	472,150	472,182	478,888	440,903
GH	108,696	108,573	92,804	65,707	53,216	45,346	44,989	47,892	44,190	46,870	67,901	79,897
SL/AL	13,303	11,177	10,888	8,822	8,769	7,660	8,179	9,153	9,092	10,875	11,570	12,266
TOTAL PUC	2,845,350	2,772,131	2,591,182	2,265,240	2,066,510	2,135,647	2,255,804	2,416,950	2,203,588	2,071,010	2,480,823	2,483,451

PENNSYLVANIA POWER & LIGHT COMPANY
MONTHLY ENERGY
GENERATION LEVEL IN MWH
YEAR ENDED DECEMBER 31, 1987

	Jan-87	Feb-87	Mar-87	Apr-87	May-87	Jun-87	Jul-87	Aug-87	Sep-87	Oct-87	Nov-87	Dec-87
PUC GROUP												
RS	1,123,726	1,061,078	1,001,968	790,130	650,113	668,031	743,427	799,721	672,877	682,401	824,612	1,000,463
GS-1	118,123	114,377	113,289	99,149	89,498	101,087	111,562	118,646	103,913	99,220	105,173	114,354
GS-3	465,801	466,039	471,702	434,581	408,153	490,259	459,017	514,969	474,558	463,872	466,788	479,514
LP-4	322,892	327,706	339,858	323,189	312,400	346,782	353,225	371,219	353,983	356,628	350,886	340,108
LP-5	389,610	399,902	413,619	404,804	402,870	439,482	440,844	456,649	446,494	479,847	472,785	423,526
GH	102,739	104,851	97,582	66,875	51,037	48,864	47,496	49,420	45,100	50,548	66,767	83,137
SL/AL	13,635	11,514	11,550	9,838	9,554	8,501	9,107	10,232	10,931	12,425	12,943	13,850
TOTAL PUC	2,536,526	2,485,467	2,449,568	2,128,566	1,923,625	2,103,006	2,164,678	2,320,856	2,107,856	2,144,941	2,299,954	2,454,952

RP - I.3.

ATTACHMENT 5

PENNSYLVANIA POWER & LIGHT COMPANY
PENNSYLVANIA JURISDICTION AND TOTAL COMPANY PEAKS
GENERATION LEVEL - IN KW
YEAR ENDED DECEMBER 31, 1996

	4-Jan-96 1900	6-Feb-96 800	8-Mar-96 2000	9-Apr-96 1000	20-May-96 1500	17-Jun-96 1400	8-Jul-96 1500	7-Aug-96 1700	9-Sep-96 1700	29-Oct-96 1900	27-Nov-96 1800	20-Dec-96 1800
TOTAL PUC	5,775,967	6,250,018	5,662,440	4,889,252	5,062,008	5,158,361	5,159,205	5,228,687	5,089,617	4,352,363	5,339,473	5,697,699

	4-Jan-96 1900	6-Feb-96 800	8-Mar-96 2000	9-Apr-96 1000	20-May-96 1500	17-Jun-96 1400	8-Jul-96 1500	23-Aug-96 1600	9-Sep-96 1700	29-Oct-96 1900	27-Nov-96 1800	20-Dec-96 1800
TOTAL COMPANY	5,977,000	6,483,000	5,853,000	5,063,000	5,239,000	5,338,000	5,329,000	5,404,000	5,265,000	4,498,000	5,514,000	5,890,000

PENNSYLVANIA POWER & LIGHT COMPANY
PENNSYLVANIA JURISDICTION AND TOTAL COMPANY PEAKS
GENERATION LEVEL - IN KW
YEAR ENDED DECEMBER 31, 1995

	5-Jan-95 800	6-Feb-95 1900	10-Mar-95 800	5-Apr-95 900	24-May-95 1400	20-Jun-95 1700	27-Jul-95 1700	2-Aug-95 1400	7-Sep-95 1700	30-Oct-95 1800	14-Nov-95 1800	11-Dec-95 1900
TOTAL PUC	5,847,365	6,173,391	5,370,838	5,014,935	4,335,318	5,327,735	5,586,719	5,727,859	4,827,756	4,474,566	5,324,439	6,095,008

	5-Jan-95 800	6-Feb-95 1900	10-Mar-95 800	5-Apr-95 900	24-May-95 1400	20-Jun-95 1700	27-Jul-95 1700	2-Aug-95 1400	7-Sep-95 1700	30-Oct-95 1800	14-Nov-95 1800	11-Dec-95 1900
TOTAL COMPANY	6,052,000	6,388,000	5,560,000	5,195,000	4,486,000	5,511,000	5,781,000	5,928,000	4,995,000	4,625,000	5,503,000	6,305,000

PENNSYLVANIA POWER & LIGHT COMPANY
PENNSYLVANIA JURISDICTION AND TOTAL COMPANY PEAKS
GENERATION LEVEL - IN KW
YEAR ENDED DECEMBER 31, 1994

	18-Jan-94 1900	2-Feb-94 800	2-Mar-94 1900	8-Apr-94 800	23-May-94 1600	15-Jun-94 1400	20-Jul-94 1800	4-Aug-94 1600	14-Sep-94 1200	28-Oct-94 900	23-Nov-94 1800	12-Dec-94 1900
TOTAL PUC	6,075,628	5,863,633	5,399,645	4,513,178	4,163,288	5,255,997	5,362,222	5,071,050	4,267,427	4,431,170	4,825,554	5,354,469

	18-Jan-94 1900	2-Feb-94 800	2-Mar-94 1900	8-Apr-94 800	23-May-94 1600	15-Jun-94 1400	20-Jul-94 1800	4-Aug-94 1600	14-Sep-94 1200	28-Oct-94 900	23-Nov-94 1800	12-Dec-94 1900
TOTAL COMPANY	6,282,000	6,077,000	5,582,000	4,672,000	4,312,000	5,442,000	5,542,000	5,246,000	4,420,000	4,580,000	4,987,000	5,536,000

PENNSYLVANIA POWER & LIGHT COMPANY
PENNSYLVANIA JURISDICTION AND TOTAL COMPANY PEAKS
GENERATION LEVEL - IN KW
YEAR ENDED DECEMBER 31, 1993

	11-Jan-93 1800	2-Feb-93 800	19-Mar-93 800	5-Apr-93 900	11-May-93 1700	18-Jun-93 1400	8-Jul-93 1400	25-Aug-93 1500	3-Sep-93 1500	14-Oct-93 1000	1-Nov-93 1900	29-Dec-93 1800
TOTAL PUC	5,235,836	5,801,466	5,520,173	4,452,351	4,240,366	4,679,206	5,141,327	5,131,796	5,003,064	4,371,429	4,807,919	5,687,733

	11-Jan-93 1800	2-Feb-93 800	19-Mar-93 800	5-Apr-93 900	11-May-93 1700	18-Jun-93 1400	8-Jul-93 1400	26-Aug-93 1700	3-Sep-93 1500	14-Oct-93 1000	1-Nov-93 1900	29-Dec-93 1800
TOTAL COMPANY	5,417,000	6,012,000	5,715,000	4,617,000	4,390,000	4,843,000	5,324,000	5,309,000	5,175,000	4,523,000	4,973,000	5,876,000

PENNSYLVANIA POWER & LIGHT COMPANY
PENNSYLVANIA JURISDICTION AND TOTAL COMPANY PEAKS
GENERATION LEVEL - IN KW
YEAR ENDED DECEMBER 31, 1992

	16-Jan-92 1800	10-Feb-92 800	11-Mar-92 2000	2-Apr-92 2000	8-May-92 1100	8-Jun-92 1400	14-Jul-92 1500	27-Aug-92 1400	10-Sep-92 1300	20-Oct-92 900	16-Nov-92 900	10-Dec-92 1800
TOTAL PUC	5,674,023	5,407,035	5,077,319	4,563,786	3,945,980	4,353,528	4,862,737	4,784,597	4,569,643	4,531,138	4,674,610	5,210,359

	16-Jan-92 1800	10-Feb-92 800	11-Mar-92 2000	2-Apr-92 2000	8-May-92 1100	8-Jun-92 1400	14-Jul-92 1500	27-Aug-92 1400	10-Sep-92 1300	20-Oct-92 900	16-Nov-92 900	10-Dec-92 1800
TOTAL COMPANY	5,870,000	5,602,000	5,253,000	4,718,000	4,092,000	4,511,000	5,037,000	4,961,000	4,735,000	4,679,000	4,845,000	5,389,000

PENNSYLVANIA POWER & LIGHT COMPANY
PENNSYLVANIA JURISDICTION AND TOTAL COMPANY PEAKS
GENERATION LEVEL - IN KW
YEAR ENDED DECEMBER 31, 1991

	22-Jan-91 800	12-Feb-91 800	12-Mar-91 800	3-Apr-91 800	30-May-91 1500	17-Jun-91 1700	23-Jul-91 1400	29-Aug-91 1700	17-Sep-91 1700	21-Oct-91 900	27-Nov-91 800	19-Dec-91 800
TOTAL PUC	5,365,486	5,055,644	4,652,769	4,192,088	4,604,505	4,635,807	5,121,924	4,906,510	4,704,629	4,169,637	4,743,383	5,439,887

	22-Jan-91 800	12-Feb-91 800	12-Mar-91 800	3-Apr-91 800	30-May-91 1500	17-Jun-91 1700	23-Jul-91 1400	29-Aug-91 1700	17-Sep-91 1700	21-Oct-91 900	27-Nov-91 800	19-Dec-91 800
TOTAL COMPANY	5,560,000	5,240,000	4,822,000	4,348,000	4,779,000	4,791,000	5,312,000	5,077,000	4,878,000	4,318,000	4,908,000	5,627,000

PENNSYLVANIA POWER & LIGHT COMPANY
PENNSYLVANIA JURISDICTION AND TOTAL COMPANY PEAKS
GENERATION LEVEL - IN KW
YEAR ENDED DECEMBER 31, 1990

	12-Jan-90 1800	26-Feb-90 800	7-Mar-90 800	9-Apr-90 900	17-May-90 1200	29-Jun-90 1400	19-Jul-90 1700	28-Aug-90 1700	7-Sep-90 1400	30-Oct-90 800	12-Nov-90 1800	27-Dec-90 1800
TOTAL PUC	4,712,500	5,336,149	5,030,675	4,297,797	3,930,005	4,371,048	4,721,843	4,655,889	4,236,610	4,142,664	4,498,892	4,986,963

	12-Jan-90 1800	26-Feb-90 800	7-Mar-90 800	9-Apr-90 900	17-May-90 1200	29-Jun-90 1400	19-Jul-90 1700	28-Aug-90 1700	7-Sep-90 1400	30-Oct-90 800	12-Nov-90 1800	27-Dec-90 1800
TOTAL COMPANY	4,883,000	5,528,000	5,211,000	4,461,000	4,075,000	4,528,000	4,888,000	4,821,000	4,395,000	4,291,000	4,661,000	5,156,000

PENNSYLVANIA POWER & LIGHT COMPANY
PENNSYLVANIA JURISDICTION AND TOTAL COMPANY PEAKS
GENERATION LEVEL - IN KW
YEAR ENDED DECEMBER 31, 1989

	5-Jan-89 900	9-Feb-89 900	8-Mar-89 800	11-Apr-89 800	8-May-89 1000	27-Jun-89 1300	26-Jul-89 1400	4-Aug-89 1500	11-Sep-89 1400	19-Oct-89 1900	21-Nov-89 1900	22-Dec-89 900
TOTAL PUC	5,274,668	5,235,787	5,086,710	4,259,247	4,028,105	4,453,422	4,748,719	4,562,831	4,256,845	4,049,717	4,807,143	5,678,786

	5-Jan-89 900	9-Feb-89 900	8-Mar-89 800	11-Apr-89 800	8-May-89 1000	27-Jun-89 1300	26-Jul-89 1400	4-Aug-89 1500	11-Sep-89 1400	19-Oct-89 1900	21-Nov-89 1900	22-Dec-89 900
TOTAL COMPANY	5,472,000	5,433,000	5,274,000	4,415,000	4,178,000	4,622,000	4,924,000	4,737,000	4,420,000	4,192,000	4,974,000	5,884,000

PENNSYLVANIA POWER & LIGHT COMPANY
PENNSYLVANIA JURISDICTION AND TOTAL COMPANY PEAKS
GENERATION LEVEL - IN KW
YEAR ENDED DECEMBER 31, 1988

	15-Jan-88 900	9-Feb-88 900	22-Mar-88 800	19-Apr-88 900	31-May-88 1700	21-Jun-88 1700	18-Jul-88 1700	11-Aug-88 1700	20-Sep-88 1700	27-Oct-88 900	23-Nov-88 900	12-Dec-88 1900
TOTAL PUC	5,277,228	4,667,977	4,432,226	3,828,771	3,926,544	4,417,061	4,518,436	4,759,283	3,791,172	4,241,648	4,271,408	5,232,856

	11-Jan-88 900	9-Feb-88 900	22-Mar-88 800	19-Apr-88 900	31-May-88 1700	21-Jun-88 1700	18-Jul-88 1700	11-Aug-88 1700	20-Sep-88 1700	27-Oct-88 900	23-Nov-88 900	12-Dec-88 1900
TOTAL COMPANY	5,477,000	4,846,000	4,593,000	3,977,000	4,070,000	4,576,000	4,680,000	4,933,000	3,928,000	4,396,000	4,436,000	5,420,000

PENNSYLVANIA POWER & LIGHT COMPANY
PENNSYLVANIA JURISDICTION AND TOTAL COMPANY PEAKS
GENERATION LEVEL - IN KW
YEAR ENDED DECEMBER 31, 1987

	28-Jan-87 800	16-Feb-87 900	11-Mar-87 900	6-Apr-87 1100	29-May-87 1400	15-Jun-87 1700	24-Jul-87 1500	4-Aug-87 1700	9-Sep-87 1700	30-Oct-87 900	11-Nov-87 1900	30-Dec-87 1900
TOTAL PUC	4,879,450	4,682,579	4,370,152	3,860,224	3,794,064	4,067,413	4,461,909	4,372,483	3,677,390	3,954,609	4,373,863	4,690,612

	28-Jan-87 800	16-Feb-87 1000	11-Mar-87 900	6-Apr-87 1100	29-May-87 1400	15-Jun-87 1700	24-Jul-87 1500	17-Aug-87 1300	9-Sep-87 1700	30-Oct-87 900	11-Nov-87 1900	30-Dec-87 1000
TOTAL COMPANY	5,063,000	4,863,000	4,543,000	4,013,000	3,939,000	4,216,000	4,627,000	4,539,000	3,811,000	4,096,000	4,532,000	4,857,000

Q. Provide work papers showing the development of each allocator (for those not already provided elsewhere) and direct assignment in the class cost-of-service study. Provide descriptions of the methods, the underlying data and calculations that show development of the allocator or direct assignment from the raw data. For normalization (e.g., weather), provide a description of the normalization and the equations used.

A. Attachment 1 shows the derivation of the allocators utilized to assign capital and operating costs associated with PP&L's bulk power capacity and energy agreements.

Allocator A1A is used to assign all costs that are not associated with PP&L's bulk power capacity and energy agreements with Atlantic City Electric Company (ACE), Jersey Central Power & Light Company (JCP&L), and Baltimore Gas & Electric Company (BG&E). Allocator A1B is used to assign nuclear production costs to the JCP&L and BG&E agreements. A1C is used to assign wholly-owned coal production costs to the JCP&L and ACE agreements. Allocator A1CC is used to assign non-nuclear, non-wholly-owned coal production cots to the JCP&L agreement. Allocator A1D assigns transmission costs to the ACE, JCP&L, and BG&E agreements. Allocators A1M and A1O provide for direct assignment of the GE Settlement and Power Plant Inventory credits to the three agreements, based on data contained in the Company's accounting records.

Attachment 2 provides an explanation of what each allocator abbreviation means and the applicable percentages assigned to each PUC jurisdictional rate class. Allocators applicable to FERC wholesale customers and UGI are calculated in a manner similar to those for PUC jurisdictional retail customers.

Allocator CW1, which is based on a review of the cost of meters for each rate class, is used to assign meter investment. Allocator CW2, which is based on a review of the cost of reading large power and other meters, is used to assign meter reading expense. Allocator CW4, which is based on a review of actual late payments charged to rate classes, is used to assign late payment charges. Allocator CW5, which is based on a review of write-offs by rate class, is used to assign uncollectible accounts expense. Allocators CW6 and CW7 are used to directly assign customer deposits and customer advances and are based on historical activity. Allocators CW8 and CW9, which are

based on a review of the number of customers taking single-phase, two-phase and three-phase service, are used to assign line transformers. Allocators C10 and C30 represent the total number of customers by rate class and the number of secondary customers by rate class, respectively. The development of allocators CW1-CW9, C10 and C30 is shown in Section A of JMK1.

The development of demand allocators D10, D15, D20, and D30, energy allocators EG10 and EG15, and allocators K403 and K405, which are used to assign costs directly to the Area Lighting and Street Lighting rate class, are shown in Section A of Exhibit JMK1. Wages and salaries allocators K929, K939 and K433 are developed within Exhibit JMK1.

The remaining allocators are all program generated and are labeled and shown on Attachment 2. They represent totals and subtotals of various categories of plant investment and operating expense items which are used to assign other items in the cost allocation study. Allocators are not derived on the basis of normalized data.

RP-I.4.
Attachment 1

PENNSYLVANIA POWER & LIGHT COMPANY

ALLOCATION OF PRODUCTION AND TRANSMISSION PLANT
TO ATLANTIC CITY, JERSEY CENTRAL, AND BALTIMORE GAS & ELECTRIC

DEVELOPMENT OF ALLOCATORS FOR PART 1
FOR COST ALLOCATION PURPOSES

FUTURE TEST YEAR ENDED 9/30/95

STATION	CAPACITY (WINTER)	ALLOCATORS - % A1B NUCLEAR PRODUCTION PLANT	A1C WHOLLY-OWNED COAL PROD. PLANT	A1CC OTHER NON-NUCLEAR PLANT	A1D TRANSMISSION PLANT
BRUNNER ISLAND	1,469				
MONTOUR	1,525				
SUNBURY	389				
MARTINS CREEK COAL	300				
HOLTWOOD	73				
TOTAL WHOLLY-OWNED COAL	3,756		100.000		
SUSQUEHANNA (PP&L 90%)	1,995	100.000			
MARTINS CREEK OIL	1,640				
KEYSTONE (PP&L 12.34%)	210				
CONEMAUGH (PP&L 11.39%)	194				
TOTAL PP&L STEAM CAPACITY	7,795				
DIESEL CAPACITY	22				
COMBINATION TURBINE CAPACITY	486				
HYDRO CAPACITY	146				
PP&L TOTAL OWNED INSTALLED CAPACITY	8,449			100.000	100.000
CONTRACT FOR CAPACITY:					
SAFE HARBOR (1/3 OUTPUT)	139				
SALE OF SUSQUEHANNA CAPACITY TO BALTIMORE G & E	(132)	6.600	0.000	0.000	1.562
WHOLLY-OWNED COAL TO ATLANTIC CITY	(129)	0.000	3.422	0.000	1.527
SALE OF SLICE OF SYSTEM TO JERSEY CENTRAL	(945)	11.185	11.185	11.185	11.185
TOTAL PP&L CAPACITY	7,382				
BALANCE (PP&L-ACE-JCP&L-BG&E) = NET ELECTRIC		82.215	85.393	88.815	85.726

DERIVATION OF ALLOCATOR PERCENTAGES

945 / 8449 = 11.185% (JERSEY CENTRAL POWER & LIGHT)

132 / 8449 = 1.562% (BALTIMORE G&E ELECTRIC TRANSMISSION)

132 / 1995 = 6.6% (BALTIMORE G&E NUCLEAR PRODUCTION)

129 / 3756 = 3.422% (ATLANTIC CITY WHOLLY-OWNED COAL)

129 / 8449 = 1.527% (ATLANTIC CITY ELECTRIC TRANSMISSION)

RP-I.4.
Attachment 2

FUTURE TEST YEAR COS
PPUC JURISDICTIONAL ALLOCATORS

PENNSYLVANIA POWER & LIGHT COMPANY

COST OF SERVICE SUMMARY - FTY
ALLOCATORS AND THEIR RATIOS

ALLOCATOR	LABEL	PA JURIS	RS	RTS	GS-1	GS-3	LP-4	LP-5	LPEP	ISA	GH	SL/AL	STANDBY
EXPRESSED IN $1,000													
METER INVESTMENT	CM1	82,998	39,573	3,057	13,650	16,002	3,609	2,594	168	316	4,029	0	0
CM1 IN PERCENT		100.00	47.68	3.68	16.45	19.28	4.35	3.13	0.20	0.38	4.85	0.00	0.00
METER READING EXPENSE	CM2	9,373	7,860	127	968	229	86	19	1	0	83	0	0
CM2 IN PERCENT		100.00	83.86	1.36	10.33	2.44	0.92	0.20	0.01	0.00	0.89	0.00	0.00
LATE PAYMENTS	CM4	6,763	3,354	26	1,256	1,461	360	127	0	0	129	50	0
CM4 IN PERCENT		100.00	49.59	0.38	18.57	21.60	5.32	1.88	0.00	0.00	1.91	0.74	0.00
UNCOLLECTIBLE ACCOUNTS	CM5	10,628	8,659	76	742	863	213	75	0	0	0	0	0
CM5 IN PERCENT		100.00	81.47	0.72	6.98	8.12	2.00	0.71	0.00	0.00	0.00	0.00	0.00
CUSTOMER DEPOSITS	CM6	1,065	20	0	298	654	45	3	0	0	45	0	0
CM6 IN PERCENT		100.00	1.88	0.00	27.98	61.41	4.23	0.28	0.00	0.00	4.23	0.00	0.00
CUSTOMER ADVANCES	CM7	39,911	15,512	0	17,168	7,231	0	0	0	0	0	0	0
CM7 IN PERCENT		100.00	38.87	0.00	43.02	18.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00
EXPRESSED IN UNITS													
LINE TRANSF CUST COMP	CM8	1,476,214	1,080,235	14,671	165,519	49,196	0	0	0	0	8,274	2E+05	0
CM8 IN PERCENT		100.00	73.23	0.99	11.22	3.33	0.00	0.00	0.00	0.00	0.56	10.66	0.00
SERVICES CUSTOMER COMP	CM9	10,628	8,659	76	742	863	213	75	0	0	0	0	0
CM9 IN PERCENT		100.00	81.47	0.72	6.98	8.12	2.00	0.71	0.00	0.00	0.00	0.00	0.00
TOTAL CUSTOMERS	C10	1,228,047	1,066,688	14,544	121,411	18,948	843	119	1	1	4,473	1,010	9
C10 IN PERCENT		100.00	86.86	1.18	9.89	1.54	0.07	0.01	0.00	0.00	0.36	0.08	0.00
SECONDARY CUSTOMERS	C30	1,227,074	1,066,688	14,544	121,411	18,948	0	0	0	0	4,473	1,010	0
C30 IN PERCENT		100.00	86.93	1.19	9.89	1.54	0.00	0.00	0.00	0.00	0.36	0.08	0.00
EXPRESSED IN KILOWATTS													
GENERATION LEVEL DEMAND	D10	5,325,423	2,044,279	97,365	268,662	1,224,068	693,487	767,820	23,258	66,294	128,090	10,000	2,100
D10 IN PERCENT		100.00	38.39	1.83	5.04	22.99	13.02	14.42	0.44	1.24	2.41	0.19	0.04
69 KV LEVEL DEMANDS	D15	5,235,871	2,044,279	97,365	268,662	1,224,068	693,487	767,820	0	0	128,090	10,000	2,100
D15 IN PERCENT		100.00	39.04	1.86	5.13	23.38	13.24	14.66	0.00	0.00	2.45	0.19	0.04
PRIMARY LEVEL DEMANDS	D20	4,465,951	2,044,279	97,365	268,662	1,224,068	693,487	0	0	0	128,090	10,000	0
D20 IN PERCENT		100.00	45.77	2.18	6.02	27.41	15.53	0.00	0.00	0.00	2.87	0.22	0.00
CLASS MAXIMUM DEMANDS	D30	5,971,000	3,396,000	265,000	465,000	1,590,000	0	0	0	0	228,000	27,000	0
D30 IN PERCENT		100.00	56.87	4.44	7.79	26.63	0.00	0.00	0.00	0.00	3.82	0.45	0.00
EXPRESSED IN MEGAWATTHOURS													
GENERATION LEV ENERGY	EG10	5,325,423	2,044,279	97,365	268,662	1,224,068	693,487	767,820	23,258	66,294	128,090	10,000	2,100
EG10 IN PERCENT		100.00	38.39	1.83	5.04	22.99	13.02	14.42	0.44	1.24	2.41	0.19	0.04
SALES LEVEL ENERGY	EG15	5,235,871	2,044,279	97,365	268,662	1,224,068	693,487	767,820	0	0	128,090	10,000	2,100
EG15 IN PERCENT		100.00	39.04	1.86	5.13	23.38	13.24	14.66	0.00	0.00	2.45	0.19	0.04
DIRECT ASSIGNMENT													
AREA LIGHTING	K403	1	0	0	0	0	0	0	0	0	0	1	0
K403 IN PERCENT		100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00
STREET LIGHTING	K405	1	0	0	0	0	0	0	0	0	0	1	0
K405 IN PERCENT		100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100.00	0.00
WAGES AND SALARIES													
EXCL ADMIN & GENERAL	K929	192,002	93,924	3,218	12,089	34,983	19,070	20,329	583	1,815	3,639	2,332	50
K929 IN PERCENT		100.00	48.92	1.68	6.30	18.20	9.93	10.59	0.30	0.95	1.90	1.21	0.03
INCL ADMIN & GENERAL	K939	227,614	111,351	3,815	14,332	41,458	22,608	24,101	691	2,152	4,302	2,765	59
K939 IN PERCENT		100.00	48.92	1.68	6.30	18.21	9.93	10.59	0.30	0.95	1.89	1.21	0.03
GENERAL PLANT ALLOC	K433	191,768	95,082	3,457	12,114	35,370	18,394	18,927	574	1,635	3,900	2,264	51
K433 IN PERCENT		100.00	49.58	1.80	6.32	18.44	9.59	9.87	0.30	0.85	2.03	1.18	0.03

FUTURE TEST YEAR COS
PPUC JURISDICTIONAL ALLOCATORS

PENNSYLVANIA POWER & LIGHT COMPANY

COST OF SERVICE SUMMARY - FTY
ALLOCATORS AND THEIR RATIOS

ALLOCATOR	LABEL	PA JURIS	RS	RTS	GS-1	GS-3	LP-4	LP-5	LPEP	ISA	GH	SL/AL	STANDBY
PROGRAM GENERATED ALLOCATORS													
TOTAL RATE BASE	RBX	5,017,178	2,285,856	98,945	302,661	1,064,881	533,792	480,584	16,216	30,930	117,256	84,686	1,471
RBX IN PERCENT		100.00	45.56	1.97	6.03	21.22	10.64	9.58	0.32	0.62	2.34	1.69	0.03
NUCLEAR PRODUCTION PLT	P07	3,191,830	1,225,253	58,357	161,024	733,654	415,647	460,198	13,939	39,734	76,771	5,994	1,259
P07 IN PERCENT		100.00	38.39	1.83	5.04	22.99	13.02	14.42	0.44	1.24	2.41	0.19	0.04
WHOLLY-OWNED COAL PLANT	P08	1,215,004	466,406	22,214	61,296	279,273	158,220	175,179	5,306	15,125	29,224	2,282	479
P08 IN PERCENT		100.00	38.39	1.83	5.04	22.99	13.02	14.42	0.44	1.24	2.41	0.19	0.04
DISTRIBUTION PLANT	P30	2,632,998	1,477,447	55,185	198,276	409,889	137,805	57,782	1,840	5,080	52,466	137,077	151
P30 IN PERCENT		100.00	56.33	2.18	7.83	16.18	5.44	2.28	0.07	0.20	2.07	5.41	0.01
NET ELECTRIC PLANT	P01	5,719,584	2,581,718	112,655	341,799	1,220,849	615,548	563,170	18,666	37,385	134,375	91,505	1,714
P01 IN PERCENT		100.00	45.14	1.97	5.98	21.35	10.76	9.85	0.33	0.65	2.35	1.60	0.03
NET PLANT NUCLEAR	P01N	2,548,392	978,255	46,593	128,563	585,758	331,857	367,427	11,129	31,724	61,295	4,786	1,005
P01N IN PERCENT		100.00	38.39	1.83	5.04	22.99	13.02	14.42	0.44	1.24	2.41	0.19	0.04
ELECTRIC PLANT IN SERV	P00	8,196,706	3,718,970	160,399	492,309	1,720,954	866,700	809,780	26,247	58,378	189,945	150,637	2,387
P00 IN PERCENT		100.00	45.37	1.96	6.01	21.00	10.57	9.88	0.32	0.71	2.32	1.84	0.03
NUCLEAR ELECTRIC PLANT	P00N	3,191,830	1,225,253	58,357	2E+05	733,654	4E+05	5E+05	13,939	39,734	76,771	5,994	1,259
P00N IN PERCENT		100.00	38.39	1.83	5.04	22.99	13.02	14.42	0.44	1.24	2.41	0.19	0.04
NON-NUCLEAR ELECT PLT	P000	5,004,876	2,493,717	102,042	331,285	987,300	451,053	349,582	12,308	18,644	113,174	144,643	1,128
P000 IN PERCENT		100.00	49.83	2.04	6.62	19.73	9.01	6.98	0.25	0.37	2.26	2.89	0.02
ELEC PLT LESS P07,08	P0000	3,789,872	2,027,311	79,828	269,989	708,027	292,833	174,403	7,002	3,519	83,960	142,361	649
P0000 IN PERCENT		100.00	53.49	2.11	7.12	18.68	7.73	4.60	0.18	0.09	2.22	3.76	0.02
PROD/TRANS/DIST PLANT	AT1	7,920,045	3,545,917	153,703	470,117	1,648,442	839,499	834,687	25,011	71,127	182,071	147,195	2,276
AT1 IN PERCENT		100.00	44.77	1.94	5.94	20.81	10.60	10.54	0.32	0.90	2.30	1.86	0.03
DEMAND COMPONENT AT1	AT1D	6,834,249	2,760,604	140,490	364,420	1,614,219	835,890	832,093	24,843	70,811	174,295	14,408	2,276
AT1D IN PERCENT		100.00	40.39	2.06	5.33	23.62	12.23	12.18	0.36	1.04	2.55	0.21	0.03
TRANS/DISTRIB PLANT	AT2	2,898,605	1,618,329	61,895	2E+05	494,245	2E+05	1E+05	3,081	8,617	61,293	1E+05	296
AT2 IN PERCENT		100.00	55.83	2.14	7.48	17.05	6.40	3.82	0.11	0.30	2.11	4.75	0.01
DEPREC RESERVE NUCLEAR	A00N	643,438	246,998	11,764	32,461	147,896	83,790	92,771	2,610	8,010	15,476	1,208	254
A00N IN PERCENT		100.00	38.39	1.83	5.04	22.99	13.02	14.42	0.44	1.24	2.41	0.19	0.04
DEPREC RES NON-NUCLEAR	A000	1,833,684	890,254	35,980	118,049	352,209	167,362	153,839	4,571	12,983	40,094	57,924	419
A000 IN PERCENT		100.00	48.55	1.96	6.44	19.21	9.13	8.39	0.25	0.71	2.19	3.16	0.02
WORKING CASH EXPENSES	WCAP	1,292,229	529,646	18,977	71,995	264,376	162,349	187,465	5,061	17,371	24,074	10,507	408
WCAP IN PERCENT		100.00	40.99	1.47	5.57	20.46	12.56	14.51	0.39	1.34	1.86	0.81	0.03
WHOLLY-OWNED COAL DEPR	ED08	62,440	23,969	1,141	3,150	14,352	8,131	9,003	272	777	1,502	118	25
ED08 IN PERCENT		100.00	38.39	1.83	5.04	22.99	13.02	14.42	0.44	1.24	2.41	0.19	0.04
OTHER NON-NUCL DEPREC	ED09	21,991	8,442	402	1,109	5,055	2,864	3,171	96	273	529	41	9
ED09 IN PERCENT		100.00	38.39	1.83	5.04	22.99	13.02	14.42	0.44	1.24	2.41	0.19	0.04
TRANSMISSION DEPREC	ED20	7,753	2,988	142	393	1,789	1,013	1,122	27	75	187	14	3
ED20 IN PERCENT		100.00	38.54	1.83	5.07	23.07	13.07	14.47	0.35	0.97	2.41	0.18	0.04
DISTRIBUTION DEPREC	ED30	70,147	41,443	1,514	5,654	10,577	3,280	1,414	47	126	1,409	4,679	4
ED30 IN PERCENT		100.00	59.08	2.16	8.06	15.08	4.68	2.02	0.07	0.18	2.01	6.67	0.01
NON-NUCL DEPRECIATION	ED000	173,679	82,494	3,403	11,020	33,857	16,371	15,825	476	1,348	3,856	4,985	44
ED000 IN PERCENT		100.00	47.50	1.96	6.35	19.49	9.43	9.11	0.27	0.78	2.22	2.87	0.03
NUCLEAR DEPRECIATION	ED00N	147,168	56,494	2,690	7,424	33,828	19,164	21,219	643	1,832	3,540	276	58
ED00N IN PERCENT		100.00	38.39	1.83	5.04	22.99	13.02	14.42	0.44	1.24	2.41	0.19	0.04
TOTAL DEPRECIATION	ED00	320,797	138,938	6,093	18,444	67,685	35,535	37,044	1,119	3,180	7,396	5,261	102
ED00 IN PERCENT		100.00	43.31	1.90	5.75	21.10	11.08	11.55	0.35	0.99	2.31	1.64	0.03

Q. Describe the functionalization of plant into two or more functional components (e.g., distribution plant into demand and customer components) and provide the work papers supporting the separation. If divisions are made separating plant into subclassification (e.g., primary and secondary distribution), describe the basis for the separation and provide work papers supporting the division.

A. Exhibit JMK 3 contains the minimum system study utilized to functionalize distribution plant into the customer-related component, the balance was treated as demand-related. Separation of demand-related distribution facilities among voltage levels was accomplished for substations and lines. The 66-138 KV and 12 KV system substation amounts were identified by location, as were the 66-138 KV lines investment. The balance of the 12 KV system was determined by a study of the overhead and underground conductor accounts. Section A of Exhibit JMK 1 includes the results of these determinations.

Q. Provide the analysis used to develop the class demands relied on in the preparation of the demand allocators for the class cost-of-service study. Indicate classes that are (or nearly are) 100% recorded by time-of-use. For other classes, provide an explanation of the method used to estimate class loads and supporting work papers.

A. Rate Schedules LP-4, IS-P, LP-5, LP-6, IS-P, ISA, and LPEP are 100 percent recorded by time-of-use. For Rate Schedules RS, RTS, GS-1, GS-3, GH, and LP-4, PP&L uses 15-minute demand from its load study sample customers along with the sample customers' and total rate class billing data to estimate the total class hourly demands. The following Ratio Estimation, Combined Estimator formula, is utilized in the calculation of the preliminary rate class hourly demand estimates at the sales level:

$$\hat{T}_y = \left[\frac{\sum_{h=1}^{L} W_h \bullet \bar{y}_h}{\sum_{h=1}^{L} W_h \bullet \bar{x}_h} \right] \bullet T_x$$

$\hat{T}_y$ = estimate of population demand
L = total number of strata
W_h = stratum weight for stratum h
$\bar{y}_h$ = average of hourly KW for all sample customers within stratum h
$\bar{x}_h$ = average of billing KWH or KW for all sample customers within stratum h
T_x = billing KWH or KW total for all customers in the population.

These preliminary sales level estimates for each rate class are multiplied by the appropriate voltage level loss factor to determine preliminary generation level class demands. Finally, the sum of the preliminary generation level class demands is adjusted to match the system demand by prorating any difference to the classes that are sampled to determine class demands.

PP&L's continuous load study provides rate class contributions to the hourly demands for all hours of the year. The contributions to the monthly system peaks are simply the 12 monthly peak hour data.

The non-coincident peak for a rate class is the maximum of the 8,760 hourly demands for the test year from PP&L's continuous load study.

Q. For each customer taking interruptible service (do not identify customers by name), provide:

a. The amount of interruptible capacity under contract.
b. The amount of firm capacity under contract.
c. The time, duration, justification, and amount of capacity reduction for each requested interruption for the most recent 3-year period.
d. The maximum load imposed by the customer on the company during each requested interruption for the most recent 3-year period.
e. If credit is awarded on a basis of actual interruption (as contrasted to a simple credit or reduced monthly demand charge for each kilowatt of interruptible service), provide the amount received for each requested interruption.

A. (a)-(b) See Attachment 1. The Firm Capacity is the Firm Power Level under which each customer was billed during December 1996. The Contract Interruptible Capacity for each customer is the difference between the maximum on-peak demand during the twelve months ended December 1996 and the Firm Power Level listed.

(c) See Attachment 2. "Emergency" in the Justification column indicates a system emergency in the Pennsylvania-New Jersey-Maryland Interconnection. "Tariff Test" means the customer(s) took part in a test of interruptibility, as provided for in Rate Schedules IS-P and IS-T and their predecessors.

The Capacity Reduction was calculated from actual KW demand readings just prior to the Company's call to the customer to interrupt and just after the 2-hour period during which the customer was obligated to reduce load to the Firm Power Level.

(d) See Attachment 1. The listed load is the maximum load imposed by the customer on the Company during the period of the interruption, starting two hours after the call for interruption and ending with the call releasing the customer from the interruption.

(e) The Company does not award a credit for actual interruption.

PENNSYLVANIA POWER & LIGHT COMPANY
INTERRUPTIBLE SERVICE CUSTOMER DATA

CUSTOMER	CONTRACT INTERRUPTIBLE CAPACITY (kW)	FIRM CAPACITY (kW)	MAXIMUM LOAD DURING INTERRUPTION 1/19/94 - 1/21/94 (kW)	11/10/94 (kW)	8/3/95 (kW)	5/21/96 (kW)
1	28,899	750	907	NOTE 1	518	518
2	20,155	300	338	NOTE 1	281	300
3	3,122	1,600	1,457	NOTE 1	1,385	1,361
4	17,360	10,000	9,994	NOTE 1	0	9,648
5	3,719	500	505	NOTE 1	323	346
6	5,492	1,800	NOTE 2	1,408	1,460	1,763
7	15,365	7,600	NOTE 2	7,750	7,231	6,947
8	3,825	1,000	1,385	NOTE 1	927	924
9	2,298	100	NOTE 2	NOTE 1	96	47
10	1,413	150	NOTE 2	NOTE 2	NOTE 2	NOTE 2
11	38,904	3,461	19,490	NOTE 1	18,586	3,461
12	95,625	7,500	15,525	NOTE 1	7,875	8,700
13	1,892	250	482	NOTE 1	133	111
14	3,191	550	562	NOTE 1	82	264
15	644	568	568	NOTE 1	0	0
16	7,589	1,600	NOTE 2	NOTE 2	NOTE 2	NOTE 2
17	1,473	14	267	NOTE 1	0	14
18	1,122	7,000	5,198	NOTE 1	6,350	5,746
19	1,673	800	NOTE 2	NOTE 2	NOTE 2	NOTE 2
20	978	700	729	NOTE 1	631	643
21	4,267	600	697	NOTE 1	559	NOTE 1
22	1,551	0	108	NOTE 1	0	0
23	6,972	1,050	2,709	NOTE 1	661	1,050
24	2,900	2,500	NOTE 2	3,629	2,203	2,419
25	1,804	100	265	NOTE 1	55	72
26	7,979	3,000	NOTE 2	2,638	2,684	2,926
27	1,216	300	139	NOTE 1	39	353
28	1,357	530	1,038	NOTE 1	362	530
29	4,624	500	2,966	NOTE 1	459	491
30	10,216	3,500	4,234	NOTE 1	3,404	2,868
31	4	20	12	NOTE 1	NOTE 2	NOTE 2
32	0	79	79	NOTE 1	NOTE 2	NOTE 2
33	11	5	NOTE 2	NOTE 2	NOTE 2	NOTE 2
34	5,422	250	233	NOTE 1	145	163
35	3,424	1,685	3,180	NOTE 1	876	1,040
36	20,427	1,000	1,987	NOTE 1	950	950
37	1,583	100	246	NOTE 1	23	22
38	2,966	500	NOTE 2	76	328	317
39	1,482	800	1,633	NOTE 1	707	800

CUSTOMER	CONTRACT INTERRUPTIBLE CAPACITY (kW)	FIRM CAPACITY (kW)	MAXIMUM LOAD DURING INTERRUPTION 1/19/94 - 1/21/94 (kW)	11/10/94 (kW)	8/3/95 (kW)	5/21/96 (kW)
40	4,318	7,000	6,854	NOTE 1	6,120	4,738
41	4,817	551	NOTE 2	NOTE 2	NOTE 2	NOTE 2
42	6,457	1,500	NOTE 2	699	1,063	1,400
43	12,831	250	4,000	168	32	250
44	1	60	62	NOTE 2	NOTE 2	NOTE 2
45	2,521	2,122	NOTE 2	2,218	962	1,256
46	2,022	2,615	NOTE 2	426	389	2,615
47	13,863	350	346	NOTE 1	194	259
48	6,048	190	190	NOTE 1	130	138
49	970	1,916	3,074	NOTE 2	1,501	1,916
50	1,472	100	NOTE 2	1,334	47	67
51	1,234	50	NOTE 2	NOTE 1	14	30
52	1,320	153	NOTE 2	103	112	102
53	708	412	233	NOTE 1	160	412
54	1,160	200	NOTE 2	66	186	70
55	1,317	800	NOTE 2	NOTE 2	NOTE 2	NOTE 2
56	1,532	1,000	NOTE 2	881	1,038	946
57	1,173	182	1,132	NOTE 1	398	182
58	1,925	79	NOTE 2	19	50	44
59	26,000	1,000	NOTE 2	NOTE 1	1,000	1,000
60	1,549	400	NOTE 2	105	213	384
61	23,458	0	3,370	NOTE 1	0	0
62	4,215	500	NOTE 2	NOTE 2	NOTE 2	NOTE 2
63	1,327	1,000	NOTE 2	911	855	950
64	4,897	1,000	NOTE 2	NOTE 2	NOTE 2	NOTE 2
65	8,083	2,000	1,737	NOTE 1	1,776	1,672
66	7,785	2,000	2,989	NOTE 1	1,944	1,918
67	1,424	250	NOTE 2	NOTE 2	NOTE 2	NOTE 2
68	2,243	1,000	2,030	NOTE 1	2,525	520
69	1,194	7,800	NOTE 2	6,791	7,508	7,249
70	2,990	665	NOTE 2	268	648	665
71	1,822	1,000	NOTE 2	NOTE 2	NOTE 2	NOTE 2
72	13,628	1,000	NOTE 3	NOTE 1	467	648
73	1,641	1,000	NOTE 2	NOTE 2	NOTE 2	NOTE 2
74	2,343	1,800	NOTE 2	1,492	1,925	1,562
75	1,984	100	560	NOTE 1	454	507

Note 1: The customer did not take part in the Tariff Test. Only new interruptible service customers or interruptible service customers with reductions in Firm Power Level took part.

Note 2: The customer was not an interruptible service customer at this time.

Note 3: The billing metering equipment malfunctioned. No data was available.

RP-I. 7.
Attachment 2

PENNSYLVANIA POWER & LIGHT COMPANY
REQUESTED INTERRUPTIONS
THREE YEAR PERIOD
ENDED DECEMBER, 1996

DATE	START TIME OF INTERRUPTION	END TIME OF INTERRUPTION	JUSTIFICATION	CAPACITY REDUCTION
1/19/94	5:06	22:30	EMERGENCY	185 MW
1/20/94	7:40	CONTINUING	EMERGENCY	201 MW
1/21/94	CONTINUING	11:51	EMERGENCY	203 MW
11/10/94	13:00	15:00	TARIFF TEST	60 MW
8/3/95	12:00	17:40	EMERGENCY	367 MW
5/21/96	10:18	16:28	EMERGENCY	365 MW

Q. Provide the documentation, work papers, and analyses to support the functionalization and classification of distribution plant into demand and customer-related components.

A. See Exhibit JMK3.

Q. Provide the documentation, work papers and analyses to support functionalization and classification of plant into generation, distribution and transmission related components.

A. See Exhibit JMK1 and the responses to Questions RP-I.1, RP-I.4, and RP-I.5.

Q. If a weather normalization adjustment is made, supply the following information regarding normal degree days and the company's weather normalization adjustment.

(a) That National Oceanic and Aeronautical Administration weather reporting station or stations that were utilized.
(b) If more than one weather reporting station was used, provide the weighting applied to each station in arriving at the composite total.
(c) The supporting National Oceanic and Aeronautical Administration data for normal degree days, if the company used anything other than the 30-year National Oceanic and Aeronautical Administration normals.

A. (a) The National Oceanic and Aeronautical Administration (NOAA) weather reporting stations used are Harrisburg, Williamsport, Avoca, and Allentown.
(b) The four weather reporting stations are equally weighted.
(c) PP&L does not use NOAA degree days calculated on a 65°F base. Analysis of PP&L system output and average temperature indicates that the more appropriate bases for weather-normalization are 55°F for heating degree days and 70°F for cooling degree days. The use of alternative bases in calculating degree days implicitly recognizes a range of temperature between 55°F and 70°F where only base load occurs and weather does not significantly impact PP&L's daily electric use. The normal and actual weather data used are based on a representation of weather during each billing month rather than a calendar month, because customers billed early in each month actually used much of their electricity in the previous month.

Q. Provide average customer demand and usage for each of the company's service offerings.

A. Average customer demand and usage at the sales level for the 12 months ended December 31, 1996, is provided in Attachment 1.

RP - I.11.

ATTACHMENT 1

PENNSYLVANIA POWER & LIGHT COMPANY
AVERAGE DEMAND IN MW
YEAR ENDED DECEMBER 31, 1996

PUC GROUP	Jan-96	Feb-96	Mar-96	Apr-96	May-96	Jun-96	Jul-96	Aug-96	Sep-96	Oct-96	Nov-96	Dec-96
RS	1,883	1,862	1,545	1,353	991	1,034	1,097	1,052	1,118	971	1,177	1,539
RTS	85	86	67	54	33	30	28	27	29	29	42	62
GS-1	192	202	174	162	138	151	163	160	170	145	155	177
GS-3	821	898	829	803	732	809	832	820	876	790	807	839
LP-4	466	516	481	481	463	505	519	513	529	498	506	496
IS-P	40	51	50	51	49	53	49	48	54	51	55	48
LP-5	302	345	323	330	320	347	337	347	364	347	369	335
IS-T	229	227	246	252	239	264	260	262	266	246	287	241
LP-6	45	55	59	61	62	67	75	69	71	67	65	64
LPEP	8	10	9	8	9	7	5	6	5	7	9	10
IS-A	37	73	66	72	65	58	64	37	67	69	77	69
GH	101	107	86	68	46	44	37	35	41	40	51	68
SL/AL	15	13	12	11	10	9	10	11	12	13	14	16
TOTAL PUC	4,224	4,445	3,947	3,706	3,157	3,378	3,476	3,387	3,602	3,273	3,614	3,964

PENNSYLVANIA POWER & LIGHT COMPANY
MONTHLY ENERGY
SALES LEVEL IN MWH
YEAR ENDED DECEMBER 31, 1996

PUC GROUP	Jan-96	Feb-96	Mar-96	Apr-96	May-96	Jun-96	Jul-96	Aug-96	Sep-96	Oct-96	Nov-96	Dec-96
RS	1,401,217	1,296,186	1,149,390	974,193	737,659	744,758	816,324	783,030	805,215	722,466	847,207	1,145,300
RTS	63,288	59,689	49,662	39,158	24,556	21,406	21,159	20,214	21,220	21,457	30,250	45,878
GS-1	143,031	140,778	129,195	116,467	102,329	108,816	120,932	119,381	122,435	107,705	111,938	131,676
GS-3	610,892	624,874	616,633	577,965	544,556	582,592	618,846	609,787	631,074	587,540	580,978	624,096
LP-4	346,899	358,794	357,814	346,553	344,566	363,907	386,451	381,972	381,163	370,241	364,151	368,861
IS-P	29,762	35,444	37,027	36,583	36,439	38,430	36,196	35,977	38,624	37,701	39,630	35,850
LP-5	224,900	240,430	240,327	237,611	237,978	249,483	250,959	258,453	261,870	257,902	265,421	249,048
IS-T	170,155	158,290	182,815	181,511	177,512	189,917	193,284	194,656	191,356	183,032	206,648	179,665
LP-6	33,146	38,403	44,054	44,088	46,170	48,218	55,584	51,528	51,342	49,767	46,615	47,792
LPEP	5,666	6,977	6,542	5,883	6,461	5,358	3,626	4,259	3,837	5,293	6,373	7,711
IS-A	27,250	50,970	49,200	51,810	48,570	41,700	47,540	27,887	48,353	51,223	55,192	50,994
GH	74,876	74,677	63,843	49,093	34,510	31,658	27,409	26,176	29,166	29,467	36,397	50,429
SL/AL	10,799	9,179	9,144	7,696	7,430	6,559	7,109	7,976	8,603	9,805	10,302	11,888
TOTAL PUC	3,141,881	3,094,691	2,935,646	2,668,611	2,348,736	2,432,802	2,585,419	2,521,296	2,594,258	2,433,599	2,601,102	2,949,188

Q. Provide a bill frequency analysis for each customer class.

A. A bill frequency analysis for each of the major rate classes is provided as Exhibit OGK-5.

Q. Does the Company have a design peak day? If yes, explain in detail how the design peak day was calculated and supply the supporting calculations.

A. No, the Company does not utilize a design peak day for rate design.

RP - I.14.
D. A. Krall
J. J. Slivka

Q. Provide the following information:

a) The Total and Peak day capacity (in megawatts) for the company's system and the designated capacity.
b) The number of customers in each class and each class' usage, by month, for the base year.

A. a) The Company's base year peak load day occurred on February 6, 1996. PP&L's total owned capacity at this time was 9014 MW (winter rating) and 8770 MW (summer rating). The average available PP&L owned, installed system peak day capacity on February 6, 1996 was 7570 MW. The "designated capacity", or capacity designated to serve PP&L loads, was 7643 MW.

b) See Attachment 3 of the response to Question RP - I.3. for the number of customers by month in each class. See Attachment 4 of the response to Question RP - I.3. for the class usage by month at the generation level. See Attachment 1 of the response to Question RP - I.11. for the class usage by month at the sales level.

Q. Provide a detailed description of the various meters used by the company to meter its customers' usage. Include the manufacturer's name, the average age, and the advantages of utilizing that type of meter. If the company has utilized any type of remote metering, provide an explanation.

A. See Attachment 1.

RP - I.15.

Attachment 1

Following is a summary of PP&L's metering population by Manufacturer, Nameplate Description, and average age.

Duncan/Landis & Gyr

Nameplate/Description	Average Age (Yrs)	Comments
MFA, Fm2, Demand Meter	53	Older adapter bases in the process of being removed.
MKS, Fm2, Straight Meter	41	Used on residences and small general services.
MQA,Fm2, Straight Meter	36	Older adapter bases in the process of being removed.
MQS, Fm2, Straight Meter	32	Used on residences and small general services.
MSE, Fm2, Straight Meter	4	Used on CL320 residential services.
MSE, Fm2, Demand Meter	6	Used on CL320 commercial services.
MSE, Fm2, TOU Meter	5	Used on CL320 residential T-O-D services (RTS).
MSS, Fm2, Straight Meter	12	Used on residences and small general services.
MSS, Fm2, Demand Meter	3	Used on CL200 commercials services.
MSS, Fm2, TOU Meter	8	Used on CL200 residential T-O-D services (RTS).
MSS, Fm2, RUG Meter	7	Used for billing and load survey data.
MSS, Fm3, Straight	3	Used for residences with transformer rated metering.
MSS, Fm3, TOU	4	Used on larger residential T-O-D services (RTS).
MTNS12, Fm12, Straight Mtr	12	Used on Network Services.
MX, Fm2, Straight Meters	1	Used on residences and small general services.
MX, Fm2, Demand Meters	1	Used on CL200 commercial services.
SSM2 Fm12 TOU Meters	1	Used on Network T-O-D Services.
SSM2 Fm17S TOU Meters	2	Used on CL200 commercial T-O-D services.
SSM2 Fm17E Demand Meters	2	Used on CL320 commercial services.
SSM2 Fm17E TOU Meters	2	Used on CL320 T-O-D services.
SSM2 Fm17K Demand Meters	2	Used on CL480 commercial services.
SSM2 Fm17K TOU Meters	2	Used on CL480 T-O-D services.
SSM2 Fm12 Demand Meters	4	Uses on CL200 Network services.
SSM2 Fm15 Demand Meters	4	Used on CL200 240V Delta Services.
SSM2 Fm15 TOU Meters	4	Used on CL200 240V Delta T-O-D Services.
SSM2 Fm16 Demand Meters	4	Used on CL200 120V Wye Services
SSM2 Fm16 TOU Meters	3	Used on CL200 120V Wye T-O-D Services.
SSM2 Fm16 RUG Meters	4	Used for billing and load survey data.
SSM2 Fm29 Demand Meters	5	Used on 2.5 Element Wye CT services.
SSM2 Fm29 TOU Meters	3	Used on 2.5 Element Wye CT T-O-D services.
SSM2 Fm29 RUG Meters	4	Used for billing and load survey data.
SSM2 Fm5 Demand Meters	3	Used for 3Wire, 3Phase CT services.
SSM2 Fm5 TOU Meters	3	Used for 3Wire, 3Phase, CT T-O-D services.
SSM2 Fm5 RUG Meters	5	Used for billing and load survey data.
SSM2 Fm8 Demand Meters	3	Used for 240V Delta CT services.

Duncan/Landis & Gyr

Nameplate/Description	Average Age (Yrs)	Comments
SSM2 Fm8 TOU Meters	4	Used for 240V Delta CT T-O-D services.
SSM2 Fm8 RUG Meters	4	Used for billing and load survey data.
SSM2 Fm9 Demand Meters	4	Used for 4W, Wye CT services.
SSM2 Fm9 TOU Meters	4	Used for 4W, Wye, CT T-O-D services.
SSM2 Fm9 RUG Meters	4	Used for billing and load survey data.
SSM Fm5 Demand Meters	6	Used for 3Wire, 3Phase, CT services.
SSM Fm6 Demand Meters	9	Used for 2.5 Element Wye CT services.
SSM Fm8 Demand Meters	9	Used for 240V Delta CT services.
SSM Fm9 Demand Meters	10	Used for 4W, Wye, CT services.
SSM2 Fm16K Demand Meters	4	Used for CL480 commercial services.
S4 Fm17E Demand Meters	1	Used for CL320 commercial services.
S4 Fm17K Demand Meters	1	Used for CL480 commercial services.
S4 Fm17S Demand Meters	1	Used for CL200 commercial services.
S4 Fm5 Demand Meters	1	Used for 3Wire, 3Phase CT services.
S4 Fm8/9 Demand Meters	1	Used for 4W Wye and 4W Delta CT services.
S4 Fm8/9 TOU Meters	1	Used for 4W Wye and 4W Delta CT T-O-D services.

General Electric

Nameplate/Description	Average Age (Yrs)	Comments
I30A Fm2 Straight Meter	49	Older adapter bases in the process of being removed.
I50A Fm2 Straight Meter	38	Older adapter bases in the process of being removed.
I50S Fm2 Straight Meter	37	Used on residences and small general services.
I50S Fm2 Demand Meter	35	Used on CL200 commercial services.
I50S Fm3 Straight Meters	27	Used on residences with CT services.
I50S Fm3 Demand Meters	32	Used on commercial services with CT services.
I55A Fm2 Straight Meters	37	Older adapter bases in the process of being removed.
I55S Fm2 Straight Meter	36	Used on residences and small general services.
I55S Fm2 Demand Meter	33	Used on CL200 commercial services.
I60S Fm2 Straight Meter	32	Used on residences and small general services.
I60S Fm2 Demand Meter	33	Used on CL200 commercial services.
I70S Fm2 Straight Meter	16	Used on residences and small general services.
I70S Fm2 Demand Meter	10	Used on CL200 commercial services.
I70S Fm2 TOU Meter	7	Used on CL200 T-O-D services.
I70S Fm2 RUG Meter	10	Used for billing and load survey data.
I70S Fm2 CL320 Straight Meter	8	Used on CL320 residential services.
I70S Fm2 CL320 Demand Meter	6	Used on CL320 commercial services.
I70S Fm2 CL320 TOU Meter	6	Used on CL320 T-O-D services.
I70S Fm2 CL320 RUG Meter	7	Used for billing and load survey data.
I70S Fm3 Straight Meter	9	Used for residences with CT services.
I70S Fm3 Demand Meter	8	Used on commercial CT services.
I70S Fm3 TOU Meter	8	Used on T-O-D CT services.

Nameplate/Description	Average Age (Yrs)	Comments
170S Fm3 RUG Meter	6	Used for billing and load survey data.
EV1Fm3 Demand Meter	3	Used on commercial CT services.
EV1Fm3 TOU Meter	3	Used on T-O-D CT services.
EV1Fm3 RUG Meter	3	Used for billing and load survey data.
EV2 Fm12 Demand Meter	3	Used for Network commercial services.
EV2 Fm12 RUG Meter	4	Used for billing and load survey data.
EV3 Fm5 Demand Meter	7	Used for 3 Wire 3 Phase CT services.
EV4 Fm9 Demand Meter	7	Used for 4W Wye CT services.
EV4 Fm9 TOU Meter	4	Used for 4W Wye CT T-O-D services.
EV4 Fm9 RUG Meter	2	Used for billing and load survey data.
EV4 Fm16 Demand	4	Used for CL200 120V Wye services.
EV4 Fm16 TOU	4	Used for CL200 120V Wye T-O-D services.
EV4 Fm16 RUG	4	Used for billing and load survey data.
EV5 Fm14 Demand	7	Used for CL200 120V Wye services.
EV5 Fm14 TOU Meter	4	Used for CL200 120V Wye T-O-D services.
EV5 Fm29 Demand Meter	7	Used for 2.5 Element Wye CT services.
EV5 Fm29 TOU Meter	4	Used for 2.5 Element Wye CT T-O-D services.
EV6 Fm8 Demand Meter	6	Used for 240V Delta CT services.
EV6 Fm8 TOU Meter	4	Used for 240V Delta CT T-O-D services.
EV6 Fm15 Demand Meter	7	Used for CL200 240V Delta services.
EV7 Fm17 Demand	2	Used for CL200 120/240V Wye/Delta services.
V62S Fm12 Straight Meter	22	Used for CL200 Network services.
V62S Fm12 Demand Meter	27	Used for CL200 Network services.
V62S Fm12 TOU Meter	9	Used for CL200 Network T-O-D services.
V62S Fm12 RUG Meter	7	Used for billing and load survey data.
V612S Fm12 Straight Meter	16	Used for CL200 Network services.
V612S Fm12 Demand Meter	12	Used for CL200 Network services.
V612S Fm12 RUG	7	Used for billing and load survey data.
V63S Fm5 Demand Meter	19	Used for 3Wire 3 Phase CT services.
V63S Fm5 TOU Meter	11	Used for 3Wire 3 Phase CT T-O-D services.
V63S Fm5 RUG Meter	17	Used for billing and load survey data.
V64S Fm9 Demand Meter	18	Used for 4W Wye CT services.
V64S Fm9 TOU Meter	11	Used for 4W Wye CT T-O-D services.
V64S Fm9 RUG Meter	18	Used for billing and load survey data
V65S Fm14 Demand	11	Used for CL200 120V Wye services.
V65S Fm14 TOU	12	Used for CL200 120V Wye T-O-D services.
V65S Fm14 RUG	8	Used for billing and load survey data.
V65S Fm29 Demand Meter	17	Used for 2.5 Element Wye CT services.
V65S Fm29 TOU Meter	8	Used for 2.5 Element Wye CT T-O-D services.
V65S Fm29 RUG Meter	15	Used for billing and load survey data.
V66S Fm15 Demand Meter	13	Used for CL200 240V Delta services.
V66S Fm15 TOU Meter	12	Used for CL200 240V T-O-D services.
V66S Fm15 RUG Meter	7	Used for billing and load survey data.
V66S Fm8 Demand Meter	20	Used for 240V Delta CT services.
V66S Fm8 TOU Meter	9	Used for 240V Delta CT T-O-D services
V66S Fm8 RUG Meter	17	Used for billing and load survey data.

Sangamo/Schlumberger

Nameplate/Description	Average Age (Yrs)	Comments
JA Fm2 Straight Meter	51	Older adapter bases in the process of being removed.
JS Fm2 Straight Meter	34	Used on residences and small general services.
J2A Fm2 Straight Meter	39	Older adapter bases in the process of being removed.
J2S Fm2 Straight Meter	40	Used on residences and small general services.
J3A Fm2 Straight Meter	35	Older adapter bases in the process of being removed.
J3S Fm2 Straight Meter	31	Used on residences and small general services.
J3S Fm2 Demand Meter	28	Used on CL200 commercial services.
J4ES Fm2 Straight Meter	7	Used on CL320 residential services.
J4S Fm2 Straight Meter	17	Used on residences and small general services.
J5S Fm2 Straight Meter	9	Used on residences and small general services.
J5S Fm2 Demand Meter	6	Used on CL200 commercial services.
J5S Fm3 Demand Meter	6	Used on commercial CT services.
J5S Fm3 TOU Meter	6	Used on residential CT T-O-D services.
S12S Fm12 Straight Meter	14	Used on Network services.
Quantum F5/F9 M/F Meters	6	Used for billing and load survey data.

Westinghouse/ABB

Nameplate/Description	Average Age (Yrs)	Comments
AB1 Fm2 Straight Meter	1	Used on residences and small general services.
ABS5U Fm12 Straight Meter	2	Used on Network services.
CA Fm2 Straight Meter	47	Older adapter bases in the process of being removed.
DA Fm2 Straight Meter	42	Older adapter bases in the process of being removed.
DS Fm2 Straight Meter	29	Used on residences and small general services.
D2A Fm2 Straight Meter	32	Older adapter bases in the process of being removed.
D3S Fm2 Straight Meter	32	Used on residences and small general services.
D4S Fm2 Straight Meter	21	Used on residences and small general services.
D4S Fm2 Demand Meter	20	Used on CL200 commercial services.
D4S2 Fm5 Demand Meter	13	Used on 3Wire 3Phase CT services.
D4S7 Fm8 Demand Meter	16	Used on 4W Delta CT services.
D4S8 Fm29 Demand Meter	17	Used on 2.5 Element 120V Wye CT services.
D4S5U Fm12 Straight Meter	16	Used for CL200 Network services.
D4S5U Fm12 Demand Meter	16	Used for CL200 Newtork services
D5S Fm2 Straight Meter	10	Used on residences and small general services.
D5S Fm2 Demand Meter	9	Used on CL200 commercial services.
D5S5U Fm12 Straight Meter	4	Used for CL200 Network services.

Remote Meter Interrogation

In 1995, PP&L began installing Remote Meter Interrogation (RMI) equipment on its largest accounts by using meters equipped with modems and either land line or cellular telephone access, PP&L now has direct access to metering at 260 accounts on its system. This has resulted in a number of benefits to PP&L and its customers. In the event of emergency load curtailments, PP&L is able to monitor the load shed by customer in a more timely fashion. Customers also have benefited because they are able to contact PP&L and obtain immediate feedback on their load data, both in tabular and graphic form.

The metering of RMI customers is done primarily with two types of meters. Schlumberger Quantums are used on those accounts where bi-directional or compensated metering is needed Most customer locations which have multiple meters are metered with Quantums because these meters can be daisy-chained and accessed on the same telephone line or cellular unit. The remainder of the RMI customers are metered predominantly with GE EV-9 meters with KRC901 registers.

Q. For each rate applicable to residential service, provide a chart or tabulation which shows the dollar and percentage effect of the proposed unbundled base rate on monthly bills ranging from the use of zero kilowatt hours to 5,000 kilowatt hours, at appropriate intervals.

A. There is no change in dollar or a percentage effect of the proposed unbundled base rate on monthly bills, therefore no tabulation or chart is being provided.

Q. For each rate schedule that requires both a billing demand (kilowatt) and energy (kilowatt hour) as the billing determinants, provide a tabulation or graphical comparison showing the percentage effect of the proposed unbundled base rate on monthly bills using several representative demand (kilowatt) levels, the monthly kilowatt hours for each demand selected to be in load factor increments of 10% starting at 0% and ending at 100% (730H) or by hours' use increments that covers approximately 95% of the bills.

A. There is no change in dollar or a percentage effect of the proposed unbundled base rate on monthly bills, therefore no tabulation or chart is being provided.

Q. Provide the cost study which was the basis for existing rates, a listing of resultant class rates of return under existing rates and class revenue allocation targets allowed in the last rate case or settlement. If targets did not produce equal class rates of return, provide your explanation of what elements of cost were not fully recovered or were over recovered by classes not providing revenues which correspond with the allowed rate of return. Provide these in electronic format as well.

A. See Exhibit JMK1 which is a fully-allocated cost of service study for the 12 months ended September 30, 1995. This exhibit represents PP&L's compliance with the results of the Commission's Final Order in the Company's most recent base rate proceeding at Docket No. R-00943271. The resulting allowed class rates of return are consistent with the Final Order and any deviations from equal class rates of return are a direct result of the Commission's findings regarding rate class revenue requirements and rate structure.

Because PP&L's cost allocation methodology is a mainframe computer-based application, it cannot be provided in a PC-based electronic format.

Q. Provide details about any informal quality of service complaints which the company has received during the two calendar years preceding the base year. Identify the nature of the complaints, the number of complaints and whether the complaints were resolved.

A. See Attachment 1.

RP-J.1.
Attachment 1

Type of Complaint	Details	Number of Complaints 1994	1995	1996	Resolved
Unplanned Power Interruptions	Customer complained about the length of a power outage or the frequency of outages.	11	14	7	All are resolved.
Planned Interruption	Customer complained because company inadvertently provided the customer the wrong date for the scheduled outage.	0	1	0	Resolved.
Service Trouble	Customer complained about the quality of service (i.e. flickering lights).	7	13	6	All complaints from 1994 and 1995 are resolved. Two from 1996 are awaiting closure from BCS.
Delay of Service	Customer complained about the length of time it took the company to install new service.	7	13	5	All complaints from 1994 and 1995 are resolved. One from 1996 is awaiting closure from BCS.

Type of Complaint	Details	Number of Complaints 1994	1995	1996	Resolved
Location of Facilities	Customer complained about the proposed location or proposed relocation of company facilities (i.e., location of pole on or near customer's property).	8	6	15	All complaints from 1994 and 1995 are resolved. Four from 1996 are awaiting closure from BCS.
Tree Trimming	Customer complained about the way trees were trimmed or the lack of tree trimming.	3	5	3	All are resolved.
Personnel Problems	Customer complained about the conduct of company employee, or felt employee was careless.	0	4	2	All are resolved.
TOTAL		**36**	**56**	**38**	

Q. Provide a list of the formal complaints filed with the Commission, regarding jurisdictional service and the Federal Energy Regulatory Commission, regarding wholesale service, related to quality of service during the two calendar years preceding the base year. Provide details on any action taken by the company in response to these complaints.

A. No formal complaints were filed with the Commission and the Federal Energy Regulatory Commission related to quality of service during the two calendar years preceding the base year.

Q. Provide a discussion of the company's policy on tracking and responding to customer complaints.

A. Customers' concerns are important to the Company. PP&L has databases which track customer complaints, including formal and informal complaints filed with the Public Utility Commission and complaints filed with the Company. The information in the databases is analyzed to determine the Company's responsiveness to its customers. The Company's policy is to complete complaint investigation as quickly as possible, but not to exceed 30 days.

The Company also tracks complaints by category to identify trends and to develop initiatives to increase customer satisfaction. On the basis of trend analyses and other assessments, the Company will make appropriate changes.

Q. (a) Provide detailed calculations and proof of revenues supporting proposed unbundled rates for generation, jurisdictional transmission, distribution and other services.

(b) Demonstrate that the proposed tariffs are in compliance with the rate cap provisions of Chapter 28.

A. (a) & (b) The detailed calculations and proof of revenues supporting unbundled rates and the demonstration that the proposed tariffs are in compliance with the rate cap provisions of Chapter 28 are provided as Exhibit OGK4.

Q. Provide complete copies of the proposed tariffs and rate schedules and the tariffs and rate schedules that were in effect at the time of filing.

A. The tariffs and rate schedules in effect at the time of the filing are provided as Exhibit OGK1. The proposed tariffs and rate schedules are provided as Exhibit OGK2.

RP - L.1.
J. R. Schadt
D.A. Krall

Q. State the basis of calculations supporting the competitive transition charge or stranded costs, if claimed. Provide on a 3.5 inch diskette in Excel Version 5.0 format, Windows version, a copy of the macro/model used for calculating the competitive transition or stranded costs and an explanation of the model.

A. See Exhibit JRS1.

Q. State all "transition costs or stranded costs" as defined at 66 Pa.C.S. §2803 "Transition Costs" that will be claimed pursuant to 66 Pa.C.S. §2808 (c)(1), (2) or (3). For each such transition or stranded cost element claimed, state:

(a) Date at which such transition or stranded cost has been or will be stranded.
(b) Basis of claim that such cost is stranded, including copies of any engineering or economic studies or other studies or memoranda supporting such claim, and all studies, analyses, and data regarding the marginal cost at which the unit will be unprofitable in a competitive generation market. Provide a full description of past, present and future efforts to mitigate each claimed transition or stranded cost.
(c) Plant or other facility with which the transition or stranded cost is associated.
(d) For each claimed transition or stranded cost, the provision of 66 Pa.C.S. §2808 under which recovery is sought.
(e) Basis of claimed prudence.
(f) Methodology of ensuring that transition or stranded costs are shared equitably by all stakeholders.
(g) If an alternative payment period is sought under §2808(b), the basis for such request.

A. (a) See Exhibit JRS1.
(b) For the basis of the claim for stranded costs, see Exhibit JRS1. For the mitigation efforts, please see the Direct Testimony of Ronald E. Hill (Statement No. 2).
(c) See Exhibit JRS1.
(d) See Exhibit JRS1.
(e) See the Direct Testimony of Ronald E. Hill (Statement No. 2).
(f) See the Direct Testimony of Susan F. Tierney (Statement No. 9).
(g) See the Direct Testimony of Joseph M. Kleha (Statement No. 3).

Q. For each stranded cost claimed, state and explain the methodology and all assumptions used to determine net present value. For any generating unit not identified for stranded cost recovery, provide a calculation of any positive (or negative) stranded costs using the same methodologies or assumptions described in L.(2)(b) above.

A. See Exhibit JRS1.

Q. For each stranded cost claimed, state the amount of securitization approval that has or will be sought and the expected rate reduction from such securitization, as well as the expected balance sheet impact from such securitization.

A. The Company currently is studying the potential costs and values of securitization and has not made any final determination on the amounts or timing of any securitization it may pursue. See the Direct Testimony of Ronald E. Hill (Statement No. 2).

Q. For each generating unit wholly or partially owned by the utility, provide the following:

(a) Net book value as of 12/31/96
(b) Depreciation reserve as of 12/31/96
(c) Accumulated deferred income tax reserve as of 12/31/96
(d) Unamortized ITC reserve as of 12/31/96
(e) Annual depreciation expense for the year 1996
(f) ITC amortization for 1996 and deferred income taxes for 1996
(g) Property taxes and any other revenue requirements for the unit in 1996
(h) O&M expenses, subdivided as fixed and variable for 1996
(i) Total revenue requirements for the unit in 1996
(j) Projected revenue requirements, based on projections of the above items, for each year of the remaining life of the unit
(k) Heat rate curves used in the system dispatch model for each unit
(l) Average heat rates at minimum loading, 50 percent, 75 percent and 100 percent
(m) Net dependable capacity for each unit
(n) Operational constraints that impact unit operations such as minimum loadings, must-run, or voltage support requirments
(o) Anticipated average equivalent forced outage rates and annual maintenance requirements for the remaining life of the unit
(p) Projected kWh generation for each unit for each year of the remaining life of the unit
(q) Anticipated or currently planned retirement date
(r) Projected annual delivered or consumed cost of fuel

A. (a)&(b) See Attachment 2 of the response to Question RP-E.1. It should be noted that retirement work in progress is added only at the functional level, not at the detailed plant account or generating unit level.
(c) See Attachment 2 of the response to Question RP-D.5.
(d) See Attachment 1.

(e) See Attachment 2 of the response to Question RP-E.1. It should be noted that this attachment does not include negative net salvage.

(f) See Attachment 1 for the ITC amortization for 1996. See Attachment 2 of the response to Question RP-D.5., for the deferred income taxes for 1996.

(g) See Attachment 2 for the estimated property taxes in 1996 The PURTA tax filing for 1996 will not be made until April 15,1997. See the response to Question L.5. for other revenue requirements in 1996.

(h) See Attachment 3.

(i) See Attachment 4.

(j) See the response to Question RP-L.1.

(k) PP&L generator heat rates used in the dispatch model are based on average incremental stages (or loading blocks) for each generating unit. These values are provided on Attachment 5. The heat rate in each loading block represents the average heat rate for that block. The full load heat rate represents the heat rate at the net dependable capacity rating. The nuclear units, #2 oil-fired combustion turbines, diesels, and Non-Utility Generators are modeled with only a full load heat rate, these units will run at full output when they are dispatched. Heat rates are not applicable to hydro units.

(l) Average heat rates at minimum loadings of 50 percent, 75 percent and 100 percent are provided on Attachment 6.

(m) Net dependable capacity for each unit is provided on Attachment 6.

(n) Operational constraints are provided on Attachment 7.

(o) Anticipated average equivalent forced outage rates are provided on Attachment 7. Attachment 8 provides annual maintenance requirements for the remaining life of the units, except for the Montour units, hydro units, and nuclear units where 20 years of data are provided.

(p) Attachment 9 provides projected kWh generation for each unit for each year of the remaining life of the units except for the Montour units, hydro units, and nuclear units where 20 years of data is provided.

(q) Anticipated retirement dates are provided on Attachment 7.
(r) Attachment 10 provides the projected annual consumed cost of fuel for each unit for each year of the remaining life of the units, except for the Montour units, hydro units, and nuclear units where 20 years of data is provided.

RP-L.5.

ATTACHMENT 1

PENNSYLVANIA POWER & LIGHT COMPANY

Schedule of ITC Amortization
12/31/96

	Balance 12/31/95	Amortization for 1996	Balance 12/31/96
Susquehanna SES			
Unit 1	($90,917,285)	$3,406,596	($87,510,689)
Unit 2	(58,659,693)	2,165,880	(56,493,813)
Other (1)	(67,568,346)	4,346,544	(63,221,802)
	($217,145,324)	$9,919,020	($207,226,304)

(1) The Company does not maintain its records in a manner that reflects the schedule of ITC amortization for each generating unit.

RP-L.5.

ATTACHMENT 2

PENNSYLVANIA POWER & LIGHT COMPANY
1996 ESTIMATED PROPERTY TAXES
By Generating Station

STEAM PRODUCTION		
Sunbury	$	641,331
Martins Creek Coal		343,608
Martins Creek Oil		1,568,524
Brunner Island		1,002,023
Conemaugh		234,523
Keystone		293,890
Montour		1,217,597
Holtwood		212,659
TOTAL STEAM PRODUCTION		5,514,155
NUCLEAR PRODUCTION		
SSES #1		15,339,832
SSES #2		14,744,523
TOTAL NUCLEAR PRODUCTION		30,084,355
HYDRO PRODUCTION		
Wallenpaupack		272,859
Holtwood		241,776
TOTAL HYDRO PRODUCTION		514,635
OTHER PRODUCTION		6,916
TOTAL PROPERTY TAXES	$	44,405,000

RP-L.5.

ATTACHMENT 3

O&M Expenses for 1996, subdivided between fixed and variable. The variable O&M are fuel costs for each plant:

	Fixed	Variable (Fuel)	Total
		(millions $)	
Nuclear			
Susquehanna	$166.0	$85.9	$251.9
Fossil			
Brunner Island	42.2	115.6	157.8
Montour	46.2	111.9	158.1
Sunbury	23.1	35.1	58.2
Holtwood #17	7.8	6.4	14.2
Martins Creek 1 & 2	17.2	22.5	39.7
Martins Creek 3 & 4	24.5	39.8	64.3
Keystone(PP&L Share)	5.7	22.3	28.0
Conemaugh(PP&L Share	6.7	15.6	22.3
Hydraulic			
Holtwood Hydro	5.8	-	5.8
Wallenpaupack	1.1	-	1.1
Other			
CTs	2.5	1.2	3.7

RP-L.5.

ATTACHMENT 4

1996 Revenue Requirements
(Millions $)

	Return	Income Taxes	Book Depreciation	Fuel Expense	Direct O&M	A&G	Decomm	Taxes Other	Total
Nuclear									
Susquehanna	$232.8	$90.8	$182.7	$85.9	$166.0	$50.1	$11.8	$42.6	$862.7
Fossil									
Brunner Island	33.7	12.0	19.9	115.6	42.2	13.1	-	5.2	241.7
Montour	29.1	10.2	14.8	111.9	46.2	14.0	-	4.5	230.7
Sunbury	14.2	5.0	10.1	35.1	23.1	7.7	-	2.2	97.4
Holtwood #17	2.2	0.7	1.9	6.4	7.8	2.3	-	0.4	21.7
Martins Creek 1 & 2	12.5	4.2	7.1	22.5	17.2	4.1	-	1.9	69.5
Martins Creek 3 & 4	21.7	7.9	15.9	39.8	24.5	5.4	-	3.5	118.7
Keystone(PP&L Share)	3.2	1.0	3.1	22.3	5.7	1.7	-	0.5	37.5
Conemaugh(PP&L Share)	7.1	2.5	5.2	15.6	6.7	1.8	-	1.0	39.9
Hydraulic									
Holtwood Hydro	6.9	2.4	1.8	-	5.8	2.0	-	1.1	20.0
Wallenpaupack	1.2	0.4	0.3	-	1.1	0.3	-	0.2	3.5
Other									
CTs	0.7	0.2	0.9	1.2	2.5	0.9	-	0.1	6.5

RP-L.5.

ATTACHMENT 5

	Net Dependable Capacity			Full Load >>>>>Incremental Heat Rates>>>>>									
	Summer	Winter		Heat Rate	Block 1		Block 2		Block 3		Block 4		Block 5	
	mw	mw	notes	btu/kwh	mw	btu/kwh	mw	btu/kwh	mw	btu/kwh	mw	btu/kwh	mw	btu/kwh
Nuclear														
Susquehanna 1	981	996	(1)	9665										
Susquehanna 2	985	999	(1)	9630										
Coal														
Brunner Island 1	321	334		9421	141	9824	60	8753	60	8997	60	9570		
Brunner Island 2	378	390		8899	143	9365	80	8160	80	8560	75	9161		
Brunner Island 3	735	745		8782	438	8777	100	8552	100	8777	97	9053		
Martins Creek 1	140	150		10777	30	14387	51	9483	30	9878	29	10249		
Martins Creek 2	140	150		10775	30	14363	51	9512	30	9861	29	10232		
Montour 1	760	770	(2)	9036	350	9635	130	8215	130	8479	150	8835		
Montour 2	745	755		9117	445	9428	90	8414	90	8624	120	8864		
Holtwood 17	72	73		11350										
Sunbury 1,2	140	152		12787	92	13659	46	11057	2	12493				
Sunbury 3	94	103		12564	40	15289	20	8850	20	10690	14	12764		
Sunbury 4	128	134		10344	52	10737	28	8626	22	9988	26	11712		
Conemaugh 1	97	97	(3)	9121	500	9475	121	8449	97	8581	98	8758	34	8907
Conemaugh 2	97	97	(3)	9121	500	9475	121	8449	97	8581	98	8758	34	8907
Keystone 1	105	105	(4)	9127	500	9575	168	8368	148	8556	34	8788		
Keystone 2	105	105	(4)	9097	500	9522	168	8374	148	8556	34	8788		
#6 Oil														
Martins Creek 3 100% oil	807	807	(5)	10122	212	11628	197	9000	197	9500	201	10245		
Martins Creek 4 100% oil	785	785	(5)	10122	207	11628	191	9000	191	9500	196	10245		
Martins Creek 3 50% oil	315	315	(5)	9905	1	11700	157	9500	157	10300				
Martins Creek 4 50% oil	315	315	(5)	9905	1	11700	157	9500	157	10300				
Natural Gas														
Martins Creek 3 50% gas	492	492	(5)	11089	205	12857	97	9000	97	11000	93	9474		
Martins Creek 4 50% gas	470	470	(5)	11089	196	12857	93	9000	93	11000	88	9474		
#2 oil-fired Combustion Turbines														
Allentown, Harrisburg	112	144		14900										
Harwood, Williamsport, Jenkins	84	108		14900										
West Shore, Fishbach, Lock Haven	70	90		13700										
Diesels	19	19		10530										
Conemaugh Diesels	2	2	(6)	10065										
Keystone Diesels	1	1	(6)	10190										
Hydro														
Holtwood	102	102												
Safe Harbor	139	139	(7)											
Wallenpaupack	44	44												
Non-Utility Generators (NUGs)	474	474	(8)											

Summary

PP&L generator heat rates used in the dispatch model are based on average incremental heat rates for various capacity loading stages (or loading blocks) for each generating unit. The heat rate in each loading block represents the average heat rate for that block. The full load heat rate represents the heat rate at the net dependable capacity rating. Some units are modeled with only a full load heat rate, as these units will run at full output when they are dispatched.

NOTES:

1.) Net dependable capacity shown for Susquehanna is PP&L's 90% ownership share.
2.) Net dependable capacity for Montour 1 includes 15mw for the auxiliary turbine generator
3.) PP&L's ownership share of Conemaugh 1&2 is shown in the net dependable capacity. The heat rate data is based on the full 850mw of each unit.
4.) PP&L's ownership share of Keystone 1&2 is shown in the net dependable capacity. The heat rate data is based on the full 850mw of each unit.
5.) The Martins Creek 3&4 generating units are modelled as three separate units to recognize seasonal operation of the units. For nine months of the year (March thru November) the units are dual-fuel fired, using #6 oil and natural gas. For the remaining three months, #6 oil is used exclusively to fuel the units. The dispatch model uses three separate generators (for each actual unit) to capture the seasonal variation, with the appropriate generators operating in the designated months of each year.
6.) PP&L's ownership share of these units.
7.) Safe Harbor hydro is included in PP&L's dispatch model as a power purchase contract. Anticipated annual energy associated with this purchase is approx. 350gwh.
8.) The non-utility generation net dependable capacity is based on December 31, 1996 conditions. The capacity will vary over time based on contract terminations or new contracts. The PP&L dispatch model includes the composite NUG capacity as a power purchase contract with an 80% capacity factor.

RP-L.5.

ATTACHMENT 6

	Net Dependable Capacity			>>>>>Incremental Heat Rates>>>>>				
	Summer	Winter		Minimum Load		50% Load	75% Load	100% Load
	mw	mw	notes	mw	btu/kwh	btu/kwh	btu/kwh	btu/kwh
Nuclear								
Susquehanna 1	981	996	(1)					
Susquehanna 2	985	999	(1)					
Coal								
Brunner Island 1	321	334		141	9824	9694	9421	9421
Brunner Island 2	378	390		143	9365	9072	8853	8899
Brunner Island 3	735	745		438	8777	8777	8736	8782
Martins Creek 1	140	150		30	14387	11585	10974	10777
Martins Creek 2	140	150		30	14363	11591	10978	10775
Montour 1	760	770	(2)	350	9635	9523	9129	9036
Montour 2	745	755		445	9428	9428	9230	9117
Holtwood 17	72	73						
Sunbury 1,2	140	152		92	13659	13659	13337	12787
Sunbury 3	94	103		40	15289	14330	12777	12564
Sunbury 4	128	134		52	10737	10341	9996	10344
Conemaugh 1	97	97	(3)	500	9475	9475	9257	9121
Conemaugh 2	97	97	(3)	500	9475	9475	9257	9121
Keystone 1	105	105	(4)	500	9575	9575	9315	9127
Keystone 2	105	105	(4)	500	9522	9522	9274	9097
#6 Oil								
Martins Creek 3 100% oil	807	807	(5)	212	11628	10378	10081	10122
Martins Creek 4 100% oil	785	785	(5)	207	11628	10378	10081	10122
Martins Creek 3 50% oil	315	315	(5)	1	11700	9514	9774	9905
Martins Creek 4 50% oil	315	315	(5)	1	11700	9514	9774	9905
Natural Gas								
Martins Creek 3 50% gas	492	492	(5)	205	12857	12208	11502	11089
Martins Creek 4 50% gas	470	470	(5)	196	12857	12208	11502	11089
#2 oil-fired Combustion Turbines								
Allentown, Harrisburg	112	144						
Harwood, Williamsport, Jenkins	84	108						
West Shore, Fishbach, Lock Haven	70	90						
Diesels	19	19						
Conemaugh Diesels	2	2	(6)					
Keystone Diesels	1	1	(6)					
Hydro								
Holtwood	102	102						
Safe Harbor	139	139	(7)					
Wallenpaupack	44	44						
Non-Utility Generators (NUGs)	474	474	(8)					

NOTES:

1.) Net dependable capacity shown for Susquehanna is PP&L's 90% ownership share
2.) Net dependable capacity for Montour 1 includes 15mw for the auxiliary turbine generator
3.) PP&L's ownership share of Conemaugh 1&2 is shown in the net dependable capacity. The heat rate data is based on the full 850mw of each unit.
4.) PP&L's ownership share of Keystone 1&2 is shown in the net dependable capacity. The heat rate data is based on the full 850mw of each unit.
5.) The Martins Creek 3&4 generating units are each modelled as three separate units to recognize seasonal operation of the units. For nine months of the year (March thru November) the units are dual-fuel fired, using #6 oil and natural gas. For the remaining three months, #6 oil is used exclusively to fuel the units. The dispatch model uses three separate generators (for each actual unit) to capture the seasonal variation, with the appropriate generators operating in the designated months of each year.
6.) PP&L's ownership share of these units.
7.) Safe Harbor hydro is included in PP&L's dispatch model as a power purchase contract. Anticipated annual energy associated with this purchase is approx. 350gwh.
8.) The non-utility generation net dependable capacity is based on December 31, 1996 conditions. The capacity will vary over time based on contract terminations or new contracts. The PP&L dispatch model includes the composite NUG capacity as a power purchase contract with an 80% capacity factor.

UNIT NAME	Operational Constraints	Anticipated Retirement Dates	Forced Outage Rate %
Allentown, Harrisburg	---	2002	6.45
Brunner Island 1	Must Run (1)	2014	9.09
Brunner Island 2	Must Run (1)	2014	7.74
Brunner Island 3	Must Run (1)	2014	12.87
Conemaugh CTs	---	2010	1.95
Conemaugh 1	Must Run (1)	2010	11.99
Conemaugh 2	Must Run (1)	2010	9.12
Diesels (PP&L combined)	---	2007, 10, 14	9.33
Holtwood 17	Must Run (1)	2009	4.80
Holtwood Hydro	Limited Energy (2)	2044	4.55
Harwood, Williamsport, Jenkins	---	2002	8.03
Keystone CTs	---	2007	3.21
Keystone 1	Must Run (1)	2007	7.54
Keystone 2	Must Run (1)	2007	12.90
Martins Creek 1	Must Run (1)	2015	10.65
Martins Creek 2	Must Run (1)	2015	7.12
Martins Creek 3 100% oil	---	2010	9.36
Martins Creek 3 50% gas	---	2010	9.36
Martins Creek 3 50% oil	---	2010	9.36
Martins Creek 4 100% oil	---	2010	6.05
Martins Creek 4 50% gas	---	2010	6.05
Martins Creek 4 50% oil	---	2010	6.05
Montour 1	Must Run (1)	2017	11.27
Montour 2	Must Run (1)	2017	12.35
Safe Harbor Hydro	See note (3)	See note (3)	See note (3)
Sunbury 1,2	Must Run (1)	2010	11.18
Sunbury 3	Must Run (1)	2010	11.18
Sunbury 4	---	2010	11.78
Susquehanna 1	Must Run (1)	2022	17.00
Susquehanna 2	Must Run (1)	2024	17.00
Wallenpaupack Hydro	Limited Energy (2)	2034	6.85
West Shore, Fishbach, Lock Haven	---	2004	14.85

Notes:

1.) The "must run" operational constraint is restricted to the first loading block of the generating unit as defined in Attachment 5 of the response to Question L.5.

2.) Energy limits for modelling purposes for Holtwood and Wallenpaupack hydro plants are 592 gwh and 80 gwh, respectively.

3.) Safe Harbor hydro is included in PP&L's dispatch model as a power purchase contract. Anticipated annual energy associated with this purchase for modelling purposes is approximately 350gwh.

RP-L.5.

ATTACHMENT 7

RP-L.5.

ATTACHMENT 8

	maintenance requirements										
	Annual maintenance requirements in weeks/year -- projections capped at 20 years										
UNIT NAME	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Allentown, Harrisburg	Maintenance weeks not included in the dispatch model for these generation units --- see note 1.)										
Brunner Island 1	0	4	0	4	0	4	0	4	0	4	0
Brunner Island 2	3	4	0	4	0	4	0	4	0	4	0
Brunner Island 3	5	0	6	0	6	0	6	0	6	0	6
Conemaugh CTs	1	1	1	1	1	1	1	1	1	1	1
Conemaugh 1	0	6	0	6	0	6	0	6	0	6	0
Conemaugh 2	8	0	6	0	6	0	6	0	6	0	6
Diesels (PP&L combined)	Maintenance weeks not included in the dispatch model for these generation units --- see note 1.)										
Holtwood 17	4	0	22	22	22	22	22	22	22	22	22
Holtwood Hydro	Maintenance weeks not included in the dispatch model for these generation units --- see note 2.)										
Harwood, Williamsport, Jenkins	Maintenance weeks not included in the dispatch model for these generation units --- see note 1.)										
Keystone CTs	1	1	1	1	1	1	1	1	1	1	
Keystone 1	6	0	6	0	6	0	6	0	6	0	
Keystone 2	0	6	0	6	0	6	0	6	0	6	
Martins Creek 1	4	0	3	0	3	0	4	22	22	22	22
Martins Creek 2	0	4	0	3	0	3	0	22	22	22	22
Martins Creek 3 100% oil (4)	0	0	3	0	0	3	0	0	3	0	0
Martins Creek 3 50% gas (4)	Martins Creek 3 modelled as 3 separate gen. units to recognize seasonal fuel use variations -- see note 4										
Martins Creek 3 50% oil (4)	Martins Creek 3 modelled as 3 separate gen. units to recognize seasonal fuel use variations -- see note 4										
Martins Creek 4 100% oil (4)	6	0	0	3	0	0	3	0	0	3	0
Martins Creek 4 50% gas (4)	Martins Creek 4 modelled as 3 separate gen. units to recognize seasonal fuel use variations -- see note 4										
Martins Creek 4 50% oil (4)	Martins Creek 4 modelled as 3 separate gen. units to recognize seasonal fuel use variations -- see note 4										
Montour 1	6	0	6	0	6	0	6	0	6	0	6
Montour 2	0	6	0	6	0	6	0	6	0	6	0
Safe Harbor Hydro	No maintenance -- modelled as a power purchase contract										
Sunbury 1,2	2	2	22	22	22	22	22	22	22	22	22
Sunbury 3	0	3	0	3	0	4	0	22	22	22	22
Sunbury 4	6	0	3	0	3	0	5	22	22	22	22
Susquehanna 1	0	6	0	6	0	6	0	6	0	6	0
Susquehanna 2	6	0	6	0	6	0	6	0	6	0	6
Wallenpaupack Hydro	Maintenance weeks not included in the dispatch model for these generation units --- see note 2.)										
West Shore, Fishbach, Lock Haven	Maintenance weeks not included in the dispatch model for these generation units --- see note 1.)										

	maintenance requirements								
	Annual maintenance requirements in weeks/year -- projections capped at 20 years								
UNIT NAME	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Allentown, Harrisburg									
Brunner Island 1	4	0	4	0	4	0			
Brunner Island 2	4	0	4	0	4	0			
Brunner Island 3	0	6	0	6	0	6			
Conemaugh CTs	1	1							
Conemaugh 1	6	0							
Conemaugh 2	0	6							
Diesels (PP&L combined)									
Holtwood 17	22								
Holtwood Hydro									
Harwood, Williamsport, Jenkins									
Keystone CTs									
Keystone 1									
Keystone 2									
Martins Creek 1	22	22	22	22	22	22	22		
Martins Creek 2	22	22	22	22	22	22	22		
Martins Creek 3 100% oil (4)	3	0							
Martins Creek 3 50% gas (4)									
Martins Creek 3 50% oil (4)									
Martins Creek 4 100% oil (4)	0	3							
Martins Creek 4 50% gas (4)									
Martins Creek 4 50% oil (4)									
Montour 1	0	6	0	6	0	6	0	6	0
Montour 2	6	0	6	0	6	0	6	0	6
Safe Harbor Hydro									
Sunbury 1,2	22	22							
Sunbury 3	22	22							
Sunbury 4	22	22							
Susquehanna 1	6	0	6	0	6	0	6	0	6
Susquehanna 2	0	6	0	6	0	6	0	6	0
Wallenpaupack Hydro									
West Shore, Fishbach, Lock Haven									

maintenance requirements

Notes:

1.) Maintenance weeks for the #2 oil-fired combustion turbines were not required in the dispatch model, as these units will only be dispatched during summer or winter peak period conditions when the units will be available for service.
2.) Maintenance weeks for the hydro units were not required in the dispatch model, as these units are modelled for limited energy with 55% of the limit applied to annual on-peak periods, and 45% to the off-peak periods.
3.) The Sunbury, Martins Creek 1&2, and Holtwood 17 units start on 22 weeks of maintenance in either 1999 or 2004, to reflect NOX operating restrictions during the May-September ozone season.
4.) The Martins Creek 3&4 generating units are each modelled as three separate units to recognize seasonal operation of the units. For nine months of the year (March thru November) the units are dual-fuel fired, using #6 oil and natural gas. For the remaining three months, #6 oil is used exclusively to fuel the units. The dispatch model uses three separate generators (for each actual unit) to capture the seasonal variation, with the appropriate generators operating in the designated months of each year.

RP-L.5.

ATTACHMENT 9

	Projected annual energy produced by each generating unit for the remaining unit life										
	Energy projections in gwh --- projections capped at 20 years										
UNIT NAME	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**
Allentown, Harrisburg	1	1	1	0	0	0	0	0	0	0	0
Brunner Island 1	1980	1724	1841	1738	1948	1806	1988	1863	2078	1934	2271
Brunner Island 2	2389	2196	2407	2248	2539	2361	2644	2451	2724	2547	2868
Brunner Island 3	4403	4647	4075	4690	4252	4736	4253	4808	4381	4986	4592
Conemaugh CTs	0	0	0	0	0	0	0	0	0	0	0
Conemaugh 1	722	629	701	631	719	638	726	645	732	651	740
Conemaugh 2	632	738	641	738	657	746	663	753	669	760	676
Diesels (PP&L combined)	0	0	0	0	0	0	0	0	0	0	0
Holtwood 17	553	592	339	346	347	348	349	349	349	349	349
Holtwood Hydro	592	592	580	592	592	592	592	592	592	592	592
Harwood, Williamsport, Jenkins	1	1	1	0	0	0	0	0	0	0	0
Keystone CTs	0	0	0	0	0	0	0	0	0	0	0
Keystone 1	695	755	662	748	679	770	695	791	712	813	0
Keystone 2	738	628	706	623	726	642	742	659	759	676	0
Martins Creek 1	608	578	563	587	612	646	638	407	441	437	505
Martins Creek 2	832	695	764	751	865	833	925	573	607	615	666
Martins Creek 3 100% oil	4	2	2	1	1	1	1	1	1	1	2
Martins Creek 3 50% gas	331	256	227	190	197	168	177	180	180	158	184
Martins Creek 3 50% oil	46	36	31	29	28	27	25	27	25	21	25
Martins Creek 4 100% oil	11	0	1	0	0	0	0	0	0	0	0
Martins Creek 4 50% gas	297	234	221	170	180	157	153	165	171	144	169
Martins Creek 4 50% oil	45	40	34	33	31	30	28	29	28	24	27
Montour 1	4492	4632	4205	4607	4358	4780	4448	4919	4621	5177	4821
Montour 2	5046	4304	4784	4282	4960	4410	5044	4503	5209	4666	5398
Safe Harbor Hydro	350	350	350	350	350	350	350	350	350	350	350
Sunbury 1,2	1060	1044	632	641	647	648	652	654	657	659	663
Sunbury 3	512	432	461	433	490	448	502	297	329	329	365
Sunbury 4	444	421	420	446	479	509	484	317	350	342	423
Susquehanna 1	7165	6338	7165	6338	7165	6338	7165	6338	7165	6338	7165
Susquehanna 2	6362	7191	6362	7191	6362	7191	6362	7191	6362	7191	6362
Wallenpaupack Hydro	80	80	78	80	80	80	80	80	80	80	80
West Shore, Fishbach, Lock Haven	1	1	0	0	0	0	0	0	0	0	0

	Projected annual energy produced by each gen. unit for the remaining unit life								
	Energy projections in gwh --- projections capped at 20 years								
UNIT NAME	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Allentown, Harrisburg	0	0	0	0	0	0	0	0	0
Brunner Island 1	2107	2338	2223	2440	2268	2478	0	0	0
Brunner Island 2	2664	2977	2769	3025	2808	3054	0	0	0
Brunner Island 3	5277	4735	5378	4795	5512	4906	0	0	0
Conemaugh CTs	0	0	0	0	0	0	0	0	0
Conemaugh 1	656	743	0	0	0	0	0	0	0
Conemaugh 2	766	679	0	0	0	0	0	0	0
Diesels (PP&L combined)	0	0	0	0	0	0	0	0	0
Holtwood 17	349	0	0	0	0	0	0	0	0
Holtwood Hydro	592	592	592	592	592	592	592	592	592
Harwood, Williamsport, Jenkins	0	0	0	0	0	0	0	0	0
Keystone CTs	0	0	0	0	0	0	0	0	0
Keystone 1	0	0	0	0	0	0	0	0	0
Keystone 2	0	0	0	0	0	0	0	0	0
Martins Creek 1	499	530	535	561	561	581	552	0	0
Martins Creek 2	670	681	686	690	692	694	695	0	0
Martins Creek 3 100% oil	1	1	0	0	0	0	0	0	0
Martins Creek 3 50% gas	167	171	0	0	0	0	0	0	0
Martins Creek 3 50% oil	25	23	0	0	0	0	0	0	0
Martins Creek 4 100% oil	0	0	0	0	0	0	0	0	0
Martins Creek 4 50% gas	157	156	0	0	0	0	0	0	0
Martins Creek 4 50% oil	28	26	0	0	0	0	0	0	0
Montour 1	5349	4879	5428	4928	5472	4957	5498	4976	5523
Montour 2	4794	5460	4852	5506	4881	5537	4902	5556	4919
Safe Harbor Hydro	350	350	350	350	350	350	350	350	350
Sunbury 1,2	663	664	0	0	0	0	0	0	0
Sunbury 3	367	379	0	0	0	0	0	0	0
Sunbury 4	414	439	0	0	0	0	0	0	0
Susquehanna 1	6338	7165	6338	7165	6338	7165	6338	7165	6338
Susquehanna 2	7191	6362	7191	6362	7191	6362	7191	6362	7191
Wallenpaupack Hydro	80	80	80	80	80	80	80	80	80
West Shore, Fishbach, Lock Haven	0	0	0	0	0	0	0	0	0

RP-L.5.

ATTACHMENT 10

	Projected annual consumed cost of fuel by generating unit for the remaining unit life										
	Projections capped at 20 years										
	($, thousands)										
UNIT NAME	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Allentown, Harrisburg	57	33	28	26	25	0	0	0	0	0	0
Brunner Island 1	32803	28922	31191	30060	34248	32326	36208	34490	39094	37033	44119
Brunner Island 2	36288	33740	37333	35610	40881	38672	44040	41502	46883	44601	51105
Brunner Island 3	66761	71173	63066	74103	68377	78930	72148	82938	76855	89047	83508
Conemaugh CTs	0	0	0	0	0	0	0	0	0	0	0
Conemaugh 1	7783	6836	7652	7002	8103	7305	8439	7615	8781	8022	9273
Conemaugh 2	6820	8015	7000	8189	7408	8536	7715	8893	8024	9372	8473
Diesels (PP&L combined)	3	2	1	1	1	1	1	1	1	1	1
Holtwood 17	6883	7564	4451	4733	4863	4990	5116	5215	5322	5449	5580
Holtwood Hydro	0	0	0	0	0	0	0	0	0	0	0
Harwood, Williamsport, Jenkins	55	32	27	25	24	0	0	0	0	0	0
Keystone CTs	0	0	0	0	0	0	0	0	0	0	0
Keystone 1	9924	11028	9866	11577	10723	12412	11432	13246	12148	14161	0
Keystone 2	10495	9148	10489	9615	11413	10316	12158	11000	12898	11739	0
Martins Creek 1	10936	10701	10524	11297	11889	12799	12808	8332	9098	9222	10685
Martins Creek 2	13220	11210	12358	12310	14281	13949	15673	9829	10521	10826	11832
Martins Creek 3 100% oil	149	63	70	43	49	26	30	27	37	24	78
Martins Creek 3 50% gas	8230	6353	5614	4828	5125	4472	4836	5045	5207	4691	5619
Martins Creek 3 50% oil	1387	1096	935	919	890	878	832	929	905	787	924
Martins Creek 4 100% oil	372	15	19	11	13	7	8	5	5	3	8
Martins Creek 4 50% gas	7361	5798	5468	4298	4685	4166	4167	4622	4941	4234	5142
Martins Creek 4 50% oil	1353	1209	1043	1024	993	978	932	1026	999	870	1016
Montour 1	67185	70711	65181	73770	71004	79492	75343	84829	81019	92586	87849
Montour 2	76103	66134	74743	69045	81473	73873	86136	78238	92089	84122	99225
Safe Harbor Hydro	0	0	0	0	0	0	0	0	0	0	0
Sunbury 1,2	11109	11280	7005	7443	7690	7876	8116	8290	8497	8735	8990
Sunbury 3	10206	8880	9581	9259	10576	9866	11245	6767	7515	7668	8578
Sunbury 4	6983	6684	6802	7399	8147	8789	8552	5697	6412	6392	8074
Susquehanna 1	29526	26311	30242	26881.16	30960	27576	32680	29292	34904	31384	37341
Susquehanna 2	24899	30010	26991	31010.71	27560	31942	28512	33809	30285	36099	32378
Wallenpaupack Hydro	0	0	0	0	0	0	0	0	0	0	0
West Shore, Fishbach, Lock Haven	46	28	24	24	24	25	24	0	0	0	0

	Projected annual consumed cost of fuel by gen. unit for the remaining unit life								
	Projections capped at 20 years								
	($, thousands)								
UNIT NAME	**2008**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**
Allentown, Harrisburg	0	0	0	0	0	0	0	0	0
Brunner Island 1	41674	47064	45509	50857	48154	53571	0	0	0
Brunner Island 2	48330	55024	52115	57973	54818	60726	0	0	0
Brunner Island 3	97717	89293	103286	93799	109875	99606	0	0	0
Conemaugh CTs	0	0	0	0	0	0	0	0	0
Conemaugh 1	8354	9609	0	0	0	0	0	0	0
Conemaugh 2	9755	8780	0	0	0	0	0	0	0
Diesels (PP&L combined)	2	1	1	1	1	1	1	1	1
Holtwood 17	5711	0	0	0	0	0	0	0	0
Holtwood Hydro	0	0	0	0	0	0	0	0	0
Harwood, Williamsport, Jenkins	0	0	0	0	0	0	0	0	0
Keystone CTs	1	1	1	1	1	0	0	0	0
Keystone 1	0	0	0	0	0	0	0	0	0
Keystone 2	0	0	0	0	0	0	0	0	0
Martins Creek 1	10797	11630	11976	12777	13049	13759	13420	0	0
Martins Creek 2	12095	12473	12749	13024	13260	13512	13745	0	0
Martins Creek 3 100% oil	35	42	0	0	0	0	0	0	0
Martins Creek 3 50% gas	5217	5474	0	0	0	0	0	0	0
Martins Creek 3 50% oil	970	932	0	0	0	0	0	0	0
Martins Creek 4 100% oil	3	4	0	0	0	0	0	0	0
Martins Creek 4 50% gas	4876	4997	0	0	0	0	0	0	0
Martins Creek 4 50% oil	1065	1025	0	0	0	0	0	0	0
Montour 1	99468	92571	105137	97435	110494	102222	115842	107101	121488
Montour 2	89923	104516	94791	109843	99444	115203	104207	120661	109178
Safe Harbor Hydro	0	0	0	0	0	0	0	0	0
Sunbury 1,2	9225	9462	0	0	0	0	0	0	0
Sunbury 3	8798	9237	0	0	0	0	0	0	0
Sunbury 4	8062	8738	0	0	0	0	0	0	0
Susquehanna 1	33473	39847	35692	42425	38037	45222	40575	48235	42670
Susquehanna 2	38606	34595	41184	36876	43911	39352	46706	41886	47349
Wallenpaupack Hydro	0	0	0	0	0	0	0	0	0
West Shore, Fishbach, Lock Haven	0	0	0	0	0	0	0	0	0

RP-L.6.
J. M. Kleha

Q. Provide a return-to-revenue factor (gross up factor) for 1999. State all assumptions made in determining said factor.

A. The revenue requirements gross-up factor for 1999 of 0.55931214 is based on the assumption that the present state gross receipts, state income and federal income tax rates remain constant.

Q. Provide a computation of each generating plant's cost per kilowatt hour using the net book value amount, providing the basis and methodology used and explain the reasonableness of each generating unit's cost/kwh.

A. See Exhibit JRS1.

Q. State the Company's preferred discount rate(s), such as weighted average cost-of-capital for use in computing net present value of lost revenues or stranded capital at each generating plant or unit.

A. See Exhibit JRS1.

RP - L.9.
S. T. Jones
J. R. Schadt

Q. For 1999 and each and every year that each generating plant would have remained in regulated rate base, provide a forecast of market clearing prices for such generation, and the company's overall portfolio of generation assets. Indicate how long after 1999 each generating unit would have remained in rate base. Indicate the rated capability of each plant or unit as of 1996 and the average capacity factor of each unit during the previous 5 years.

A. See the direct testimony of Scott T. Jones (Statement No. 7) and Joseph R. Schadt (Statement No. 8).

Q. Provide an operations and maintenance expense efficiency factor, representing the Company's estimate of potential cost savings and productivity measures available to the Company to reduce costs and remain competitive in the future markets. Explain and identify by FERC account each O&M expense category which may be reduced and each account that is not capable of reduction due to as yet unrealized cost savings and productivity measures.

A. The Company does not have a specific operation and maintenance expense efficiency factor representing potential cost savings and productivity measures to reduce costs and remain competitive. The ultimate performance measure is whether the Company can make a sufficient return to meet its shareowners' expectations given competitive market prices. The expected return or profit becomes a function of a number of factors, only one of which is O&M expenses. Some of these factors are: (1) sales volume, (2) cost and efficiency of capital equipment, (3) how the capital equipment is financed, (4) financing cost rates, (5) working capital needs, (6) tax rates, and (7) O&M expenses. It is the intermixing of these factors that determines whether the Company can remain competitive in future markets. Business decisions involve the interrelationships of all these factors.

The Company has taken a number of steps to minimize its O&M expenses while continuing its ability to provide a high quality of service to its customers. See the response to Question RP-L.2. for an identification of stranded cost mitigation steps, many of which result in O&M expense reductions. In order to attain the O&M expense estimates reflected in this filing, the Company has undertaken a number of system changes to either reduce O&M expenses, or restrain their rate of in case. The following information systems are under development with the goal of reducing the number of employees and the applicable O&M expenses, reducing inventories, improving work planning or reducing cycle time. They include:

Nuclear Information Management System (NIMS)--An integrated set of computer applications to support work processes at the Susquehanna nuclear facility. Modules include work management, material management, radiation protection, security, document management, and training. This system is expected to result in reductions in the number of employees required and impact the FERC nuclear production O&M accounts.

Service Improvement Through Teamwork (SIGHT)--Process/organizational changes, and new systems/technology related to planning and scheduling physical line work, an electronic data base of the Company's distribution facilities such as transformers, poles and switches, computer-aided dispatch for customer service and trouble calls, and a work management system. It is expected to result in reductions in the number of employees and contractors, lower material costs and improve bill collection costs. The system would primarily impact the FERC distribution and customer service O&M accounts.

Customer Link 2000--A replacement for the current mainframe customer information system. This project will permit a range of billing options to multiple customer locations, tailored billing options and on-line access to customer information which will improve customer response and satisfaction. Costs and savings from this project would impact the FERC customer service O&M accounts.

Resource Acquisition Project (RAP)--A business process re-engineering for materials acquisitions including needs identification, requisitioning, bidding and evaluation, purchasing, receipt, warehousing, release to user, and installation and consumption. This project would primarily impact the FERC fossil and nuclear production O&M accounts, as well as the distribution O&M accounts.

Cash Operations & Payable Project (COP)--A re-engineering project to improve the efficiency of the Accounts Payable and disbursement processing function, increase on-line information availability and improve internal controls. It is expected to result in reductions in the number of employees required and would impact the FERC administrative and general O&M expense accounts.

Human Resources/Payroll (HR/PR)--Systems application dealing with employee performance and salary administration, payroll preparation, training, career development and succession planning, recruitment, and workforce payroll distribution. Costs and savings would be reflected in the FERC administrative and general O&M accounts.

Integrated Work Management System (IWMS)--A work management system for the fossil and hydro generating facilities for equipment tracking, maintenance management, and service management. It is expected to result in reductions in the number of employees required and lower cycle time. This system would impact the FERC fossil and hydro production O&M accounts.

It is impossible to predict specifically which FERC O&M accounts may be reduced. The descriptions provided above generally identify the major functional O&M expense account categories which may be affected.

RP - L.11.
Various

Q. Provide appropriate inflation factors which may be applied to sales (MWH), O&M expense, stranded costs other than net plant, fuel expense (by type of fuel), and other regulatory assets currently included in base rates and currently not included in base rates.

A. Sales (mwh) are not derived by applying an inflation factor. Sales are projected using an econometric model.

The inflation factor applied to O&M expenses and stranded costs other than net plant was 2.5%.

See the Direct Testimony of Dr. Scott T. Jones (Statement No. 7) for the inflation factors applied to fuel expenses.

No inflation factor was applied to regulatory assets. Regulatory assets are amounts established by using current balance sheet accounts. Future estimates of these balances are based on the applicable amortizations of the various regulatory assets.

RP-L.12.
J. M. Kleha

Q. Provide a proposed methodology to allocate the following expenses among the company's various kinds of generation (by fuel) consistent with your proposed cost of service study:

(a) Original cost of plant in service
(b) Accumulated depreciation and amortization
(c) Construction Work in Progress
(d) Nuclear Fuel Inventory
(e) Working Capital
(f) Regulatory Assets
(g) Accumulated Deferred Income Taxes
(h) Depreciation Expense
(i) Amortization Expense
(j) Taxes other than income taxes
(k) Insurance
(l) Operation expenses
(m) Maintenance expenses
(n) Fuel expense (Gas, coal, etc.)
(o) Miscellaneous expenses
(p) Nuclear Decommissioning expenses
(q) Purchased power - existing contracts
(r) Federal Income Taxes

A. Consistent with its long-standing cost allocation practice and procedures, and with the cost allocation study accepted by this Commission at Docket No. R-00-943271, PP&L would propose to allocate the indicated capital and operating expense items by direct assignment. For those items where direct assignment may not be appropriate, e.g., working capital, income taxes-current and deferred, insurance, regulatory assets and liabilities, and miscellaneous expenses, PP&L would propose to allocate such items by use of an appropriate general purpose allocation factor, i.e., labor or net plant. PP&L would not propose to allocate purchased power expense among its various generating plants. See Exhibit JMK1.

RP-L.13.
J. M. Kleha

Q. Provide a proposed methodology allocating the following costs to type of generation (steam, nuclear, etc) and by customer classes consistent with your proposed cost of service study:

(a) Return on investment
(b) Depreciation and amortization expense
(c) Taxes other than income and insurance
(d) Operations and maintenance expense
(e) Fuel expense
(f) Miscellaneous expenses
(g) Nuclear decommissioning expense
(h) Purchased power
(i) Federal income taxes

A. See Exhibit JMK1 and the response to Questions RP-A.3. and RP-A.4.

RP-L.14.
J. M. Kleha

Q. Provide a methodology to allocate, for each type of generation used including purchased power (if unclassifiable by fuel type), the company's sales in MWH for each year of the forecast period.

A. PP&L does not assign its sales (disposition of energy) by type of generation or purchased power. For the 12-month period ended December 31, 1996, PP&L's mix of energy sources was:

Nuclear	15,192,060 MWH
Coal	22,485,491 MWH
Hydro	769,804 MWH
Oil/Gas	981,829 MWH
Purchased Power	9,532,259 MWH

RP-L.15.
J. M. Kleha

Q. For each year of the forecast period used to quantify a claimed competitive transition charge, provide a methodology to designate an appropriate allocation of sales in MWH for each type of generation used, including purchased power (if unclassifiable by fuel type) among the customer classes.

A. See the response to Question RP-L.14.

Q. Provide a detailed explanation, including all assumptions and computations used to allocate its proposed recovery of net stranded costs (CTC and ITC) in a manner that does not shift inter- or intra- class costs, maintains consistency with the allocation methodology for utility production plant accepted by the commission in the company's most recent base rate proceeding and principally pays down capitalization.

A. See the Direct Testimony of Dr. Susan F. Tierney (Statement No. 9), Douglas A. Krall (Statement No. 10), and Joseph M. Kleha (Statement No. 3) for a description of the Company's unbundling methodology.

As described in these testimonies, PP&L's unbundling approach begins with the applicable retail tariff for each rate class. For each rate schedule, transmission and distribution costs are assigned on the basis of the cost allocation study accepted by the Commission in PP&L's most recent base rate case at Docket No. R-00943271. See Exhibit JMK2. These functional costs are subtracted from the appropriate tariff elements (i.e., customer charges and energy charges). The remainder is the total amount of generation-related costs. From the total generation-related costs, market supply costs are subtracted to determine the amount of generation-related costs to be recovered through the competition transition charge applicable to each rate class. Supply costs are based on market prices for energy and capacity as set forth in the Direct Testimony of Dr. Scott Jones.

This approach results in a determination of competitive transition charges to individual rate classes that is consistent with the most recent Commission-approved PP&L cost allocation study.

Q. Provide a graphed function showing amount of stranded capital (y-axis) relative to market clearing prices (x-axis), using the following prices for market clearing prices: 2 cents/kwh, 2.5 cents/kwh, 3 cents/kwh, 3.5 cents/kwh, 4 cents/kwh, 4.5 cents/kwh and 5 cents/kwh.

A. PP&L is unable to respond to this guideline at this time, because insufficient information has been provided. Energy prices are a function of a number of factors which also affect the cost of producing that energy. For example, the guideline does not indicate whether the market clearing price has changed because of a change in fuel prices or a change in capacity prices. If fuel prices have changed, assumptions regarding which fuel prices changed (e.g., coal, oil or gas) would have to be provided. Additionally, the guideline provides no information as to the changes in demand that should be assumed to result from the changes in market clearing price. Clearly, more energy would be used at a market clearing price of 2 cents than at a marketing clearing price of 5 cents, but no information is provided as to how responsive demand would be to price changes.

These are only some of the variables and assumptions that would have to be specified in order to provide the information requested. PP&L is willing to meet with Commission staff to discuss these and other factors that would be appropriate to consider in developing the information requested for alternative market clearing price assumptions.

Q. Explain in full detail your proposed procedures for ensuring direct access to all licensed electric generation suppliers and how you will avoid conflicts of interest, improper use or distribution of customer or proprietary information obtained in the course of providing direct access.

A. See the direct testimony and associated exhibits of William H. Whitehead (Statement No. 12), Robert M. Geneczko (Statement No. 13) and Henry W. Baumann (Statement No. 14).

Q. Describe your proposed universal service and energy conservation cost recovery mechanism, with regard to the requirements of 66 Pa. C.S.§2802 (10) and 2804 (9) along with supporting calculations and work papers.

A. The proposed universal service and energy conservation cost mechanism is described in the Capacity and Energy Rider within PP&L's proposed Tariff (Exhibit OGK-2). Supporting calculations are included in the Direct Testimony of Timothy R. Dahl. (Statement No. 16).

Q. Explain in full detail the proposed procedures for interaction with electric generation suppliers operating on the utility system and with customers which also provide generation (net metering customers).

A. See the direct testimony of Henry W. Baumann (Statement No. 14).

Q. Explain in full detail proposed procedures for customer selection of alternate generation suppliers.

A. The Company will send a list of licensed alternative suppliers to customers upon request. Customers can use this list as a reference when considering an alternative source of supply.

When a customer selects an alternative supplier, the alternative supplier will notify the Company of this selection. The Company will send the customer a notice of a change in supplier. Unless the customer contacts the Company to the contrary, the Company will proceed to change suppliers in accordance with the information provided by the alternate supplier.

Q. State proposed procedures for customer selection during the phase-in process and the resolution of disputes. Provide a detailed discussion of how the company will satisfy the competitive disadvantage provisions of 66 Pa. C.S. 2806(b)(4) prior to the availability of full direct access prior to the issuance of formal regulations.

A. See direct testimony of Henry W. Baumann (Statement No. 14).

Q. State the technical systems and procedures that must be in place in order for the company to act as an open access distributor, including a timetable for implementation, its dependencies and critical path.

A. All of the technical systems and procedures that are necessary for the Company to act as an open access distributor have been developed and are either in place or will be in place by January 1, 1999. Among these technical systems and procedures are:

OASIS -
An existing Internet-based, PJM-operated, Open Access Same-time Information System (OASIS), developed in accordance with FERC Order 889, for eligible customers to request transmission service.

Alternative suppliers who provide energy from sources outside the PJM Control Area for delivery to retail customers located within the PJM Control Area will be required to use the OASIS to obtain transmission service to deliver the energy from their source to the PJM Control Area.

All energy sources located within the PJM Control Area or energy that has been delivered into the PJM Control Area may then be distributed to the end-use customers located within the PJM Control Area under existing retail tariffs which do not require any further transmission reservation or scheduling activities at this time.

ALTERNATIVE SUPPLIER ENERGY SCHEDULING -
In the short term (prior to 1/1/99), Alternative Suppliers will schedule energy transactions with the LDC who will pass schedule information to PJM. In the long term (after 1/1/99), Alternative Suppliers may schedule energy transactions with PJM and confirm their schedules with the end-use customers' local distribution company (LDC). PJM energy transaction scheduling protocol in effect at the time will apply to Alternative Suppliers.

The Alternative Suppliers' energy schedules will be used as the basis for energy balancing between the end-users' actual use and the Alternative Suppliers' forecast. In the short term (prior to 1/1/99), this energy balancing service will be performed by the LDC. In the Long term (after 1/1/99), it may be performed by another entity (i.e. PJM ISO/PX or a third party).

CUSTOMER AND ALTERNATIVE SUPPLIER BILLING PROCEDURES - The Company is developing a system to handle billing for PP&L energy and delivery charges, as well as billing for alternative suppliers. The system is expected to be operational by January 1, 1999. The Company has developed a process for sending billing information to alternative suppliers electronically. This process will be used in the Company's retail access pilot program. The process will be modified based on experience acquired in the pilot.

Q. Provide a detailed discussion of the impacts of the proposed restructuring plan on the employees of the utility, the utility's federal, state and employer taxes and the concomitant influence on local communities.

A. It is difficult to separate the impact of restructuring from the Company's ongoing initiatives to preserve and improve its financial performance. A plan to reduce the work force to achieve better alignment with projected work loads was announced in early 1992. At that time, total full-time employment was 8,043 and a process for identifying excess positions was implemented, along with very stringent controls on new hiring. These measures focused on specific jobs and led to a "targeted" reduction of 366 jobs over the subsequent two years and, by year-end 1993, total employment was 7,677. These reductions are referred to as "targeted" because they involved the elimination of specific jobs that were identified as excess and the incumbents were offered alternative job opportunities whenever possible, a choice of certain early retirement or severance arrangements.

During the early part of 1994, this plan to adjust the work force was reviewed in light of the then current projections of workload and financial position. It was determined that additional reductions were necessary to utilize the work force effectively and to maintain the Company's financial position. As a result a voluntary early retirement program, featuring certain one-time pension benefit enhancements, was offered to all employees. By the end of 1994, 640 employees elected to retire under this program and total employment was 6,661 at year-end 1995; a reduction of 1,382 employees over the number in place in the beginning of 1992.

Following the voluntary early retirement initiative, the process of implementing "targeted" reductions was reactivated and, during 1996, the Company also identified about 300 bargaining unit jobs that were no longer required based on projected work loads. Most of the employees involved in this phase of job reductions were placed in alternative jobs. However, about 53 employees rejected the jobs offered for various reasons and 22 were actually laid off because of lack of suitable work. These changes brought PP&L's total regular full-time employment level to 6,428 at the end of 1996.

Projections of work load and employment needs for the next five years, which will encompass the period of transition to retail customer choice de-regulation in Pennsylvania, indicate that additional reductions will be necessary. These changes are expected to reduce the work force by an additional 400 to 450 jobs by 2001 and bring the Company's total employment level to approximately 6,000. These changes are based on anticipated work requirements and, as noted above, cannot be directly linked to the Company's restructuring plan. In fact, restructuring is expected to add some jobs related to selling energy in a broader market. However, overall employment will continue to decline during the transition period and each job reduction does have an impact on the taxes paid by the Company and its employees. Based on current averages, the elimination of each job represents a payroll reduction of about $51,100, which in turn, reduces federal income taxes by $9,350, state income taxes by $1,400 and local wage taxes by about $510. Additionally, payments made toward Workers Compensation and Unemployment taxes are reduced by about $700 annually. Therefore, the projected reduction of an additional 400 to 450 jobs by 2001 could reduce the various payroll tax payments made by employees and the Company by $4.8 to $5.4 million.

Q. Demonstrate how the company has considered and will consider the experience and expertise of its work force in moving towards competition and the utility's plan to maintain existing levels of reliability and service.

A. Historically, the Company has attempted to provide alternative placement opportunities to qualified employees when their jobs are eliminated due to technological, organizational or other changes. This process has continued throughout the period since 1992 when activities to better align the work force with anticipated work loads was accelerated.

Displaced management employees are offered alternative placement opportunities whenever it is possible based on their skills and the Company's needs. To maximize the opportunities for such placements, severance arrangements are made available to employees who may wish to volunteer for termination if their departure will provide a position for someone whose job was eliminated but prefers to remain employed. When such matches are not possible, these employees are eligible for special severance arrangements that provide service-related periods of pay and benefit continuation that can provide values of up to two years pay. The Company also provides access to the services of a major outplacement consulting firm to assist employees with their searches for alternative employment.

Employees displaced as a result of the elimination of non-supervisory jobs are covered by the terms of the Company's labor agreement with the IBEW. This agreement includes comprehensive provisions regarding job and pay security that provides senior employees a variety of opportunities to be transferred to other work if their jobs are eliminated. Under this agreement, union members who have at least ten years of service may accept placement in lower paying jobs without a reduction in pay and the Company is committed to providing retraining as appropriate. The net result is, that if the magnitude of the reductions in jobs require some employees to be laid off, the most junior employees in the work force at the time are the ones who actually leave.

These approaches to handling reductions in force are designed to provide maximum opportunity for experienced and skilled employees to remain in the employ of the Company during periods when the total size of the work force is being reduced for any reason. Taken together, these arrangements will enable the Company to retain employees with the expertise required to assure a continuation of high standards of reliability and service throughout the restructuring period.

RP-N.3.
M.J. Berish

Q. List all planned office or plant closings or consolidations for the calendar years ending 1997, 1998, 1999, 2000 and 2001. State any associated impacts on local communities, social services or any tax implications.

A. There are no plans to close any power plants or significantly change current office or crew locations. Some reporting locations for mobile maintenance personnel may change but such locations have always been of a temporary nature, that is, they are opened and/or closed as the geographical location of their work load requires.

RP-N.4.
M.J. Berish

Q. Provide a listing and thorough discussion of any planned or currently effective lay-off plans or actions, early retirement programs, hiring freezes or other work force changes in existence after December 31, 1996 and which will be in effect for the years 1997, 1998, 1999, 2000 and 2001.

A. Review vacancies and elimination of work and/or positions that are not cost-effective has been an on-going process for several years and is expected to continue. However, this is being done on a job-by-job basis and there are no current plans to accelerate this activity or offer any special early retirement enhancements to stimulate turnover. As noted in the response to Question RPN-1, PP&L has already made significant reductions in employment since 1992. This resulted from a combination of measures including the voluntary early retirement program in 1994, the displacement of over 250 management employees since 1994 and the recently completed reassignment of 300 bargaining unit employees under the terms of the labor agreement. Although an additional reduction of about 400 total jobs is expected over the next five years, these changes will average less than 80 jobs per year and this level of change can take place without any special plans or actions.

It is anticipated that the current arrangements for providing alternative placement opportunities and/or severance benefits to displaced managers will continue throughout the restructuring period. Although the labor agreement provisions regarding job and pay security are open for discussion during the contract negotiations that will commence in March 1997, it is expected that the general nature of these arrangements will continue even if agreement is reached to revise some of the current language.

Q. Provide a copy of any securitization filing submitted prior to the filing of the restructuring plan.

A. See the response to Question RP - L.4.

Q. Provide a discussion of any contemplated acts of merger, consolidation, acquisition or disposition by the company.

A. It is the Company's long-standing policy not to comment on questions involving matters of this type (i.e., potential merger and acquisition activity or related rumors or speculation.)

Q. Provide a description of any contemplated creation of new business entities by the company.

A. None.

RP-O.4.
M. J. Berish

Q. List accumulated deferred federal income tax amounts held by the utility.

A. See Attachment 1 of the response to Question RP-D.5.

Q. Provide a schedule of when deferred state taxes are to be paid.

A. See Attachment 2 of the response to Question RP - D.5.

RP-O.6.
R.M. Geneczko

Q. Provide a discussion and description of the utility's proposed functional separation between regulated and nonregulated operations.

A. See the direct testimony of Robert M. Geneczko (Statement No. 13) and Exhibits RMG1 and RMG3.

Q. Provide a listing of each universal service and energy conservation policy, activity and service during the two years ending December 31, 1996. For each such policy, activity and service, state budgeted and actual funding during the two years by the company, along with any funding or contribution by any third party source.

A. PP&L's universal service and energy conservation programs are listed below:

- -- OnTrack Payment Program
- -- Winter Relief Assistance Program (WRAP)
- -- Keep Warm Plan
- -- Operation HELP
- -- Customer Assistance & Referral Evaluation Service (CARES)

The funding levels for each program during 1995 and 1996 are shown below. It should be noted that the Keep Warm Plan, which is a weatherization program for customers with annual incomes between 151 to 200 percent of the federal poverty level, did not start until 1996. In addition, the funding level for CARES reflects the wages and benefits paid to PP&L's five Customer Programs Directors.

Program	Budgeted Funding 1995	Budgeted Funding 1996
OnTrack Payment Program	$2,000,000	$2,000,000
WRAP	3,023,300	3,023,300
Keep Warm Plan	-0-	1,000,000
Operation HELP	1,056,382*	794,646
CARES	260,000	260,000
Total	$6,339,682	$7,077,946

*This amount includes $300,000 from a Settlement Agreement with the PUC in which PP&L agreed to distribute these funds to the 16 Operation HELP administering organizations. The Settlement Agreement was negotiated to resolve various violations of the PUC's Chapter 56 regulations.

Program	Actual Funding 1995	Actual Funding 1996
OnTrack Payment Program	$1,876,824	$1,700,118
WRAP	3,038,948	2,990,666
Keep Warm Plan	-0-	534,269
Operation HELP	1,056,382	794,646
CARES	260,000	260,000
Total	$6,232,154	$6,279,699

Q. Regarding the provisions of 66 Pa.C.S. 2804 (9) and (15), state how the company intends to continue its universal service and energy conservation activities, which programs it intends to continue, how it will fund such programs, whether it commits itself to fully expend such funds, whether it intends to establish new programs or enlarge, reduce or eliminate existing programs, how it will determine the effectiveness of programs, how it intends to determine funding levels for each program and for its overall universal service and energy conservation efforts.

A. See the direct testimony of Timothy R. Dahl (Statement No. 16).

Q. Describe the company's existing consumer protection policies and services, including, but not limited to customer assistance plans, CARES, hardship funds, LIURP programs, Gatekeeper programs and other energy assistance programs. For each program, state the funding and participant level. For LIHEAP funding, include annual figures for the past 5 years. Identify the current organizational structure which provides these services, including in-house and outside individuals, departments, and organizations with current staffing and funding levels.

A. PP&L's various programs, policies, and services for special-audience customers, including low-income, are described below:

1. OnTrack Payment Program -- This three-year pilot program for 2,000 low-income customers started in January 1994. OnTrack offers reduced monthly payments, arrearage forgiveness, protection against shut-offs, and referrals to other programs such as weatherization and energy assistance. The special payment plan is based on family size, income, and electric use. OnTrack is administered by 11 community-based organizations.

2. Winter Relief Assistance Program (WRAP) -- WRAP is a free weatherization program for low-income customers. Implemented in March 1985, WRAP offers weatherization services and individualized energy conservation counseling. To qualify for WRAP services, applicants must meet the income guidelines; be individually-metered PP&L customers; be at least 18 years of age; and own or rent a home or apartment. WRAP income guidelines are set at 150 percent of the federal poverty level, but can go as high as 175 percent of poverty for hardship cases.

3. Keep Warm Plan -- This free weatherization program targets the so-called "working poor" families (those between 151 percent and 200 percent of the federal poverty level). The Keep Warm Plan offers the same weatherization services and energy conservation counseling provided through WRAP. In fact, the community-based organizations (CBOs) and/or private contractors that deliver WRAP services also deliver the Keep Warm Plan services. Except for the income levels, the guidelines for WRAP and the Keep Warm Plan are identical.

4. Operation HELP -- PP&L started this fuel fund in 1983. It is funded by donations from PP&L, its customers and employees and is administered by 16 CBOs throughout the Company's service area. The fund operates year-round and pays any type of home heating bill. Assistance is limited to one grant annually, and all payments go directly to the energy vendor. The program targets low-income customers (at or below 175 percent of the federal poverty level) who are confronted with hardship and have overdue energy bills.

5. CARES -- This special outreach and referral service started in 1982. CARES handles customers whose hardship circumstances prevent them from paying the full amount of their electric bills. The program provides affordable payment plans, protection against shut-offs, and referrals to a variety of other assistance programs. CARES targets customers who are confronted with temporary personal or family hardships. The referral criteria to CARES include illness, injury, or medical bills that significantly reduces household income; previously good-paying customer with temporary hardship situation; recent loss of job or major reduction in household income; and abandoned spouse or low-income elderly.

6. Double Notice Protection Plan -- This plan allows a customer to designate a third party (e.g., family member, minister, social service agency) to receive copies of all Company collection notices. However, third-party participants are under no obligation to pay the customer's bill. This procedure provides another layer of protection to prevent unnecessary shut-offs for special needs customers.

7. Extended Due Date Plan -- Pension checks normally reach people within the first few days of each month. A senior citizen's bill may be due at a time when it cannot be conveniently paid from the customer's pension check. This plan allows Social Security recipients and others who depend on pensions to extend the due date of their electric bills to avoid late payment charges.

8. Waiver of Late Payment Charges -- PP&L routinely waives late payment charges for customers receiving a grant through the Low Income Home Energy Assistance Program (LIHEAP).

9. Communications -- PP&L has the capability to communicate directly with customers who are hearing- or speech-impaired. Through the use of a telecommunications device for the deaf (TDD), customers can contact PP&L's Customer Contact Center. A toll-free TDD number is available Monday through Friday from 7 a.m. to 7 p.m. In addition, the Company offers electric bills in Braille to sight-impaired customers.

10. LIHEAP -- PP&L will continue promote the availability of LIHEAP to customers through a variety of mediums (e.g., bill insert, special mailings). The customer service representatives at the Customer Contact Center (CCC) also refer customers to local organizations that administer LIHEAP.

11. Guardian Program -- The Company's field personnel have the opportunity to observe customers' circumstances first hand. If PP&L field personnel encounter unusual situations at customers' residences (e.g., piled up newspapers, unkempt lawns, concerns expressed by neighbors), they can contact the Company's Customer Programs Directors (CPDs). The CPDs, who administer PP&L's CARES Program, will investigate the situation and intervene on behalf of the customer if appropriate.

12. Earned Income Credit -- PP&L will continue to inform customers about the availability of the federal Earned Income Credit (EIC), which offers tax benefits to lower income working families. The Company will use a bill insert and targeted mailings to inform customers about the EIC. In addition, PP&L's customer service representatives at its CCC have information about the program in order to answer customers' inquiries.

    The annual spending level and number of participants for PP&L's major assistance programs are shown below. The figures are for the year ending December 31, 1996.

	Annual Funding	Number of Participants
OnTrack	$1,700,118	1,309
WRAP	2,990,666	2,640
Keep Warm Plan	534,269	406
Operation HELP	794,646	3,478
CARES	260,000	450

The organizational structures that are currently in place to administer PP&L's primary assistance programs are described below.

OnTrack – The overall coordination of the pilot program is the responsibility of a Customer Relations Specialist who is a member of the Customer Services' staff. PP&L's CPDs are the local interface with the CBOs that administer OnTrack. PP&L uses 11 CBOs to administer the pilot; a list of the organizations can be found in Attachment 1. The total administrative expenses for OnTrack in 1996 were $131,140.

WRAP -- A Customer Relations Specialist is responsible for coordinating and directing WRAP. PP&L's regional CPDs have the day-to-day responsibility of overseeing WRAP. They are the primary contact with the local organizations that administer the program. A list of the organizations can be found in Attachment 2. The annual administrative cost for WRAP totaled $547,466 in 1996.

Keep Warm Plan -- The same PP&L employees and outside organizations that administer WRAP are responsible for implementing the Keep Warm Plan.

Operation HELP -- A Customer Relations Specialist oversees and directs the program. PP&L's CPDs are the local contacts between the Company and the 16 Operation HELP organizations. A list of the community organizations can be found in Attachment 3. PP&L provided a total of $62,000 in administrative funding to the Operation HELP organizations in 1996.

CARES -- The CARES function is administered by PP&L's five CPDs. Their annual salaries and benefits were approximately $260,000.

PP&L's LIHEAP results (i.e., number of customers assisted, funds received) are shown in the following table.

Program Year	Funds Received	Customers Assisted
1995-96	$ 2,213,264	9,973
1994-95	3,432,060	14,200
1993-94	3,387,980	15,164
1992-93	4,064,079	17,426
1991-92	4,841,846	18,878
Total	$17,939,229	75,641

RP-P.3.
Attachment 1

OnTrack Payment Program
Administering Organizations

1.	Community Action Commission of the Lehigh Valley	Bethlehem
2.	Community Action Program of Lancaster County	Lancaster
3.	Community Action Commission	Harrisburg
4.	STEP, Inc.	Williamsport
5.	Northumberland County Planning Commission	Sunbury
6.	Union-Snyder Office of Human Resources	Selinsgrove
7.	Economic Opportunity Cabinet of Schuylkill County	Pottsville
8.	Columbia County Department of Human Services	Bloomsburg
9.	TREHAB, Inc.	Montrose
10.	Commission on Economic Opportunity	Wilkes-Barre
11.	Scranton-Lackawanna Human Development Agency	Scranton

RP-P.3.
Attachment 2

Winter Relief Assistance Program (WRAP)
Administering Organizations

1. Community Action Committee of the Lehigh Valley	Allentown
2. Scranton-Lackawanna Human Development Agency	Scranton
3. Commission on Economic Opportunity	Wilkes-Barre
4. Carbon County Action Committee for Human Services	Lehighton
5. Economic Opportunity Cabinet of Schuylkill County	Pottsville
6. Redevelopment Authority of Wayne County	Honesdale
7. TREHAB, Inc.	Montrose
8. Northumberland County Weatherization	Coal Township
9. SEDA-Council of Governments	Lewisburg
10. STEP, Inc.	Williamsport
11. Dauphin County Weatherization	Elizabethville
12. Rovegno's of Carlisle	Carlisle
13. Community Action Program of Lancaster County	Lancaster

RP-P.3.
Attachment 3

Operation HELP
Administering Organizations

1. Community Action Commission of the Lehigh Valley	Bethlehem
2. Opportunity Council of Buck County	Doylestown
3. Open Line, Inc.	Pennsburg
4. United Way of Monroe County	Stroudsburg
5. Carbon County Action Committee for Human Services	Lehighton
6. Commission on Economic Opportunity	Wilkes-Barre
7. The Salvation Army-Citadel Corps	Scranton
8. TREHAB, Inc.	Montrose
9. STEP, Inc.	Williamsport
10. American Red Cross - Danville Chapter	Danville
11. Columbia County Department of Human Services	Bloomsburg
12. Northumberland County Planning Commission	Sunbury
13. Union-Snyder Office of Human Resources	Selinsgrove
14. Economic Opportunity Cabinet of Schuylkill County	Pottsville
15. Christian Churches United	Harrisburg
16. Community Action Program of Lancaster County	Lancaster

Q. Fully describe your proposed consumer education program, and describe how it has been designed in accordance with the requirement of 66 Pa. C.S.2807 (d) to inform customers of the changes in the electric utility industry, how the education program will provide consumers with information necessary to help them make appropriate choices as to their electric service and how such information will be provided in an understandable format that enables consumers to compare prices and services on a uniform basis.

A. See the direct testimony of Dawn G. Lennon (Statement No. 17).

Q. Identify all criteria used by the company to categorize customers as low income customers. State the collection costs for the base year 1996 associated with handling low income customer accounts including administrative expenses associated with termination activity (10-day termination notice, personal contact; 48-hour notice, actual termination of service, post-termination and restoration costs), negotiating payment arrangement requests, budget counseling, handling formal and informal complaints, securing and maintaining deposits, tracking delinquent accounts, collection agency expenses, litigation expenses, dunning expenses and winter survey expenses.

A. Customers with annual household incomes at or below 150 percent of the federal poverty level are considered low income for the purpose of negotiating payment plans. The 1997 income levels by family size for 150 percent of poverty are shown below:

Family Size	Household Income
1	$11,835
2	15,915
3	19,995
4	24,075
5	28,155
6	32,235
Each additional person	4,080

PP&L estimated collection costs for calendar year 1996 are shown below:

Revenue Collection Department	
- Payroll costs	$3,238,555
- Collection agency/attorney fees	1,215,975
- Other costs (including chargebacks)	1,642,554
Facilities Costs (estimated)	
- Office space	164,230
- Telephone Equipment	24,000

PP&L's Office of General Counsel	
- Internal support for collection activities	450,000
- External legal counsel	350,000
Meter Reading & Service	
- Costs to process 70,000 work orders	875,000
Total Estimated Annual Collection Costs	$7,960,314

PP&L requires very few residential customers to pay a security deposit. As a result, the costs of securing and maintaining security deposits are not tracked. The Company's annual postage costs for sending dunning letters was $1,104,564 in 1996.

Q. State the dollar amount of the company's gross residential write-offs for 1996, the portion related to low-income customers or an estimate of the portion related to low-income customers.

A. The total gross write-offs for residential customers and the portion of write-offs attributable to low-income customers are shown below..

Total Gross Write-offs:

Gross Write-off Residential Finalled Accounts	$22,777,203
Gross Write-off Low Income-Active Accounts	5,603,262
OnTrack Revenue Shortfall	1,094,799
OnTrack Arrearage Forgiveness	434,179
Total Gross Write-off	$29,909,443

Low Income Gross Write-off (estimated):

Residential Finalled Accounts	
- 50% of terminations - Level 1	$11,565,253
- 20% of terminations - Level 2	4,626,101
Active Accounts	5,603,262
OnTrack Revenue Shortfall	1,094,799
OnTrack Arrearage Forgiveness	434,179
Total Gross Write-off for Low Income	$23,323,594

Q. State how many residential service customers were served in 1996, the number of residential customers known to be low income customers, and total estimated low income customers by the company's definition of low income customers. State how many residential customers are payment troubled customers, how payment troubled customers are low income customers, and how does the company define "payment troubled." How many low income customers are known to be payment troubled customers, and what is the estimate of the total number of low income, payment troubled customers?

A. The numbers of customers by category are shown below. In some instances, the numbers are estimated based on 1990 U. S. Census data or PP&L data.

Total residential customers served in 1996	1,081,949
Total low-income residential customers (actual)	Not Available
Total low-income residential customers (estimated)	177,464
Total residential payment-troubled customers (actual)	141,895
Total residential payment-troubled customers (low income)	58,000*
Total residential payment-troubled customers (estimated)	83,895

* This number is estimated.

Payment-troubled customers are defined as customers who are having difficulty paying their electric bills, have overdue electric bills, and have contacted PP&L one or more times to negotiate payment plans.

Q. State the company's definition of a residential account in arrears, the total number of residential accounts in arrears in 1996, the number of those accounts which were low income customers, dollars in arrears owed by identified low income customers, and total number of dollars in arrears (identified and estimated).

A. PP&L defines arrearage as any residential bill that is overdue ten days past the payment due date. The number of accounts in arrears, dollars in arrears, etc., are shown below:

Total residential customers	1,081,949
Total average residential customers in arrears	141,895
Estimated low-income customers in arrears	58,000
Total residential dollars in arrears	$47,724,000
Total low-income overdue dollars (estimated)	$25,000,000

Q. What would CAP enrollment be if the program was large enough to accommodate all low income negative ability to pay customers? State number of customers still in need of LIURP services. State how much it would cost to serve all customers which need LIURP services.

A. PP&L estimates that there are 58,000 low-income (at or below 150 percent of the federal poverty level), payment-troubled customers who would qualify for the Company's OnTrack program. All of these customers have overdue balances with PP&L.

WRAP targets income eligible customers who have electric heat as their primary energy source. Based on the 1990 U. S. Census, there are approximately 177,000 customers with household incomes at or below 150 percent of the poverty level. Given PP&L's electric heat saturation of 31 percent, it is estimated that nearly 55,000 WRAP-qualified households would have electric heat. Between 1985 and 1996, about 22,500 (41 percent of low-income electric heat households) electric-heat customers have received weatherization services through WRAP. The estimated cost to serve the remaining electric heat customers (55,000 - 22,500 = 32,500) would be $39 million, or 32,500 customer jobs x $1,200 average cost per job.

Q. Does the company intend to shift traditional collection costs to fund universal service and energy conservation activities? What is the plan for accomplishing this? If there is no such plan, why not?

A. As a result of more low-income customers being enrolled in PP&L's OnTrack Payment Program, the Company should realize savings associated with improved cash flow and a reduction in overdue accounts receivable. In addition, PP&L will avoid collection and regulatory costs for those customers who enroll in OnTrack. PP&L's estimated collection costs (i.e., dunning letters, 10-day termination notice, three-day notice, service termination, and post-termination activities) are $75 per customer. It costs the Company over $1,000 to handle a consumer that progresses from an informal complaint investigation to a formal complaint hearing with an Administrative Law Judge.

These cost savings would be redirected to collecting from customers with an ability to pay. Refocusing revenue collection activities on ability-to-pay customers could produce increased results due to additional and more aggressive collection programs. These more aggressive programs have not been initiated previously due to the large volume of work associated with collecting from low-income customers. These stepped-up collection efforts would be accomplished in full compliance with Chapter 56.

Q. State all plans to use community based organizations to assist low income customers, and state known technical and administrative experience of such organizations to assist such customers.

A. PP&L intends to continue using the variety of community-based organizations (CBOs) that administer the Operation HELP, WRAP, Keep Warm Plan, and OnTrack programs throughout its 29-county service area. A list of these organizations can be found in Attachments 1-3 in the response to Question RP-P.3.

The technical and administrative experience of the CBOs in regard to each program is described below.

Operation HELP -- Most of these CBOs have been administering the program for 15 years. The CBOs helped to develop the program's procedures, and they meet annually with PP&L representatives to review policies, procedures, and results. Their involvement includes conducting intake (e.g., verifying income, determining eligibility, documenting circumstances), keeping detailed client and financial records, processing required paperwork, handling program funds (receiving and disbursing), and referring customers to other programs and services.

WRAP and Keep Warm Plan -- The capabilities required by the CBOs to effectively administer these programs includes conducting energy audits, performing sophisticated diagnostic tests (e.g., blower door technology), installing a broad range of weatherization services, providing energy conservation education, coordinating the delivery of WRAP and Keep Warm Plan services, and maintaining detailed records. In addition, the CBOs representatives must have good communication skills for interactions with customers.

OnTrack -- The capabilities needed by the CBOs to administer OnTrack include conducting intake, explaining the program requirements in detail, establishing payment plans, coordinating with other services, and conducting timely follow-up activities. Other requirements include proficiency with a personal computer and a familiarity with PP&L's customer information system. Strong communications skills and good record keeping procedures also are important components.

Q. State how new customers will apply for electric service and select a generation supplier. State how electric power will be supplied in the event that new or existing customers do not, or are unable to select a third party generation supplier.

A. New customers requesting delivery service from PP&L will contact the Company's Customer Contact Center and provide the name, address and social security number of the person in whose name the account will be listed. The customer will be provided an approximate date for the establishment of delivery and will be asked for the name of the preferred alternative supplier. A security deposit may be required at that time. If the customer does not have a preferred alternative supplier, the Company will provide energy at tariff rates until the customer selects one. The customer should arrange supply with an alternative supplier who will then contact the Company. Supply from the alternative supplier will begin at the start of the customer's next supply cycle.

The Company will provide energy at tariff rates if a new or existing customer does not have or is unable to obtain supply from an alternative supplier.

Q. If the utility intends to bill customer for all electric services regardless of generation supplier, provide a proposed billing format. Show how charges will be unbundled to enable customers to determine the basis for each charge. State the procedures which will be employed to receive accurate, timely billing data from other providers in rendering customer bills after restructuring commences. State how the company intends to prevent the improper disclosure or use of sensitive or proprietary customer information, obtained from outside generation suppliers for billing purposes, within the company or to third parties. Indicate how the company will apply partial payments in satisfaction of the unbundled charges. State how customer billing inquiries or complaints will be handled in a timely and effective fashion.

A. See Attachment 1 for the proposed billing format with unbundled charges.

PP&L's Competition Pilot program will employ several methods of billing data exchange, and in the course of the pilot, the Company will establish the most effective manner of exchange for ultimate use after restructuring commences. In a single bill scenario, appropriate billing data (rates, charges, tariffs, etc.) will be received from the alternative supplier and entered into PP&L's billing system. The customer will be billed based on actual usage as determined by meter readings. The customer's bill will reflect appropriate PP&L unbundled charges as well as alternative supplier charges. Any required data exchanges between the alternative supplier and PP&L will be accomplished through Electronic Data Interchange (EDI) or a secure Internet site for those alternative suppliers who can support these methods. Other alternatives (i.e., FAX) also will be considered.

The Company will adopt a code of conduct which defines sensitive and proprietary customer information, restricts access to this information to only those employees involved in customer billing, supply scheduling, reconciliation, and supplier payment. A copy of this code of conduct is provided as Exhibit RMG3.

Unbundled charges will be included with other charges, (such as sales tax, products and services, and area light) in the cash application hierarchy rules. Payments will be applied to the charges based on the applicable rules.

PP&L will use the services of its Customer Contact Center and its toll-free access number to address all inquiries or complaints consistent with regulations of the Commission.

RP-P.13.
Attachment 1

Pennsylvania Power & Light Company

111 1111 111

Electric Service

For:

JOHN SMITH
908 S ARMOUR ST L39
ALLENTOWN, PA 18103

Customer Service
P.O. Box 3500
Allentown PA
18106-0500
1-800-342-5775

PRIOR BILLING		
Total From Last Bill	$143.29	
Payment Received Feb 20 - Thank You!	-143.29	
Balance as of Mar 3, 1997		$ 0.00
CURRENT CHARGES Jan 28 - Feb 28		
Residential Rate: RS		
Basic Service (T&D)	$ 6.47	
Delivery (T&D) at x.xxx¢ per KWH	x.xx	
Competitive Transition Charges:		
Use: 200 KWH at x.xxx¢ KWH	xx.xx	
600 KWH at x.xxx¢ KWH	xx.xx	
728 KWH at x.xxx¢ KWH	xx.xx	
PP&L Charges for Electric Service		$xxx.xx
A/S Market Energy Charges	$xx.xx	
A/S Market Capacity Charges	xx.xx	
Total Charges for Electric Service		**$xxx.xx**

A/S Name
Address #1
Address #2
Address #3
Phone: xxx/xxx-xxxx

Important information on back →

Return this part to address below with a check payable to PP&L

Total After Due Date

111 1111 111 $xxx.xx

JOHN SMITH
908 S ARMOUR ST L39
ALLENTOWN, PA 18103

PP&L
TWO NORTH NINTH STREET
ALLENTOWN PA 18101

Q. Provide a proposed billing format for customers who choose to be billed separately for energy service by their electric generation provider. Show how charges will be unbundled to enable customers to determine the basis for each charge. State the procedures which will be employed to receive accurate, timely billing data from other providers (if any) in rendering customer bills after restructuring commences. Indicate how the company will apply partial payments in satisfaction of the unbundled charges. State how customer billing inquiries or complaints will be handled in a timely and effective fashion.

A. See Attachment 1 for the proposed billing format with unbundled charges.

It will be necessary for PP&L to provide alternative suppliers with energy usage data for billing purposes. PP&L proposes to use electronic means wherever feasible.

Unbundled charges will be included with other charges, (such as sales tax, products and services, and area light) in the cash application hierarchy rules. Payments will be applied to the charges based on the applicable rules.

PP&L will use the services of its Customer Contact Center and its toll-free access number to address all inquiries or complaints consistent with regulations of the Commission.

RP-P.14.
Attachment 1

Pennsylvania Power & Light Company

111 1111 111

Electric Service

For:

JOHN SMITH
908 S ARMOUR ST L39
ALLENTOWN, PA 18103

Customer Service
P.O. Box 3500
Allentown PA
18106-0500
1-800-342-5775

PRIOR BILLING

Total From Last Bill	$143.29
Payment Received Feb 20 - Thank You!	-143.29
Balance as of Mar 3, 1997	$ 0.00

CURRENT CHARGES Jan 28 - Feb 28

Residential Rate: RS	
Basic Service (T&D)	$ 6.47
Delivery (T&D) at x.xxx¢ per KWH	x.xx
Competitive Transition Charges:	
Use: 200 KWH at x.xxx¢ KWH	xx.xx
600 KWH at x.xxx¢ KWH	xx.xx
728 KWH at x.xxx¢ KWH	xx.xx
PP&L Charges for Electric Service	$xxx.xx

A/S Name
Address #1
Address #2
Address #
Phone: xxx/xxx-xxxx

Important information on back →

Return this part to address below with a check payable to PP&L

Total After Due Date

111 1111 111

$xxx.xx

JOHN SMITH
908 S ARMOUR ST L39
ALLENTOWN, PA 18103

PP&L
TWO NORTH NINTH STREET
ALLENTOWN PA 18101

Q. If the utility intends to permit generation suppliers (including its own generation affiliate or division) to bill all charges, provide a proposed billing format. Show how charges will be unbundled to enable customers to determine the basis for each charge. State the procedures which will be employed to transmit accurate, timely billing data from other providers in rendering customer bills after restructuring commences. Indicate how the billing company will apply partial payments in satisfaction of the unbundled charges. State how customer billing inquiries or complaints will be handled in a timely and effective fashion.

A. PP&L does not intend to permit alternative generation suppliers to bill those charges associated with the services provided to customers by PP&L.

Q. Describe how the company will provide customer service functions consistent with the requirements of 66 Pa. C.S. §2807(d) and 2809(e).

A. PP&L will provide customer service functions consistent with all Commission regulations. The Company's level of quality will, at a minimum, remain consistent with current levels. PP&L will continue to strive to increase the quality of service provided to its customers. Internal evaluation of customer complaint handling also will be maintained to assure compliance with PUC regulations. This is consistent with current operating procedures.

§ 2807(d) (1) states that the Commission shall establish regulations to ensure that an electric distribution company does not change a customer's electricity supplier without direct oral confirmation from the customer of record or written evidence of the customer's consent to a change of supplier. A customer's request to change electricity supplier will be provided to PP&L by the alternative energy supplier. When PP&L receives this information, a letter will be sent to the customer confirming their enrollment with the alternative supplier. The letter will advise the customer to contact PP&L if this information is inaccurate.

§ 2807(d) (2) indicates that each electric distribution company, electricity supplier, etc. must provide adequate and accurate customer information to enable customers to make informed choices. PP&L's informational program is designed to communicate current information about restructuring, the activities of the competitive marketplace, and the benefits of PP&L as an electricity supplier. The Company's information program will reinforce the fundamental concepts and basic facts that are needed for a customer to make an informed choice. The Company will continue to follow plain language guidelines in its customer choice materials.

§ 2807(d) (3) requires each electric distribution company to implement a consumer education program informing customers of the changes in the electric utility industry. PP&L will offer customers a Customer Choice Handbook, designed to serve as a balanced consumer reference. This handbook will explain restructuring, answer basic questions about what customer choice is, how it works, what the risks and trade-offs are, and how to participate. The handbook will provide worksheets that customers can use to determine if choosing another electricity supplier will benefit them. The Company will promote the availability of this handbook widely, through bill inserts, newspaper ads, and newspaper articles. Customers also will be able to request a copy by calling a dedicated 800 number and through PP&L's website. Prior to review by the PUC, the handbook will be reviewed by a cross-section of community and consumer leaders for objectivity, balance, and completeness.

§ 2809(e) requires that the present quality of service does not deteriorate, including assuring that adequate reserve margins of electric supply are maintained and assuring that 56 Pa. Code Ch. 56 regulations, are maintained. PP&L anticipates continuation of appropriate reserve margins consistent with the standards of the North American Electric Reliability Council (NERC). PP&L expects to comply with these standards regardless of whether they are enforced by an Independent System Operator or by individual distribution companies acting as their own control areas. PP&L has included a reserve margin which is consistent with NERC standards in its calculation of market price and in its proposed rates. PP&L will continue to monitor its compliance with Chapter 56 regulations. If a violation of Chapter 56 occurs, initiatives will be developed, as appropriate, and corrective action taken to prevent recurrence. Compliance will continue to be a high priority.

Q. Describe fully the company's proposed customer education and information program relative to restructuring, including the explanation of restructuring to individual customers, to groups and through mass advertising, in customer solicitations, in responding to customer inquiries with regard to outreach programs.

A. The Company's customer education program is a developmental process of providing balanced, and timely information to all customers, using a variety of media and methods, so they can make informed decisions when choosing their electricity providers. Developed as a consumer education program, it provides customers with the fundamental knowledge and understanding needed to make informed selections of an electricity supplier. It is comprehensive, sequential, ongoing, and has measurable and observable outcomes. It is designed to "teach" consumers what questions to ask and what factors to consider when selecting an electricity supplier.

The customer education program will use mass media to communicate the availability of educational materials to customers; it also will include a variety of methods to provide additional customer choice education to individual customers, community organizations, and groups.

The Company will make available to customers a customer choice handbook that explains restructuring, answers basic questions about what customer choice is, how it works, what the risks and trade-offs are, and how to participate. This handbook will provide worksheets that customers can use to determine if choosing another electricity supplier will benefit them. The Company will promote the availability of this handbook widely, through bill inserts, newspaper ads, its website, and newspaper articles. Customers can request a copy by calling a dedicated toll-free number and through PP&L's website.

In addition to the handbook, the Company will provide specially-trained customer choice "educators" to speak at community organization meetings about the fundamentals of customer choice. For community leaders who need to be able to answer questions about customer choice, the Company will offer workshops tailored to the needs of these leaders.

The Company's information program is different from its education program. The information program is designed to communicate current information about restructuring, activities in the competitive marketplace, and the benefits of PP&L as an electricity supplier. The Company's information program will, however, reinforce the fundamental concepts and basic facts that are presented in the education program -- items that an informed consumer needs to understand to make a good choice. It also will use terminology consistent with terms used in the education program, being sure to follow plain language guidelines.

Q. Describe how the company intends to ensure that plain language is employed in company communications with customers in the future, including in bills, sales contracts, and in handling billing for third parties.

A. The Company has and will continue to follow plain language guidelines in all customer choice education materials, customer information, and billing. This is consistent with customer education and information materials disseminated as part of the competition pilot and with the Company's electric service bills for customers participating or not participating in the pilot. Any sales contracts used by the Company with customers outside its service territory also will follow plain language guidelines.

Q. If the Company intends to use outside contractors or third parties in situations requiring customer contact or education, describe the circumstances and what services will be provided.

A. As has been its practice for many years, the Company will work closely with community and consumer organization leaders to develop and disseminate customer choice education materials. Input will be sought from these leaders on the quality and effectiveness of materials prior to publication, on the content and design of educational workshops prior to their delivery, and on the development and use of any supplemental educational materials prior to dissemination.

The Company will be prepared to conduct educational workshops for community organizations and groups to provide them with the fundamentals of customer choice education so that they will be able to conduct educational sessions for their constituents.

Q. Describe what statistical or survey techniques the company intends to utilize to determine the effectiveness of its customer education efforts. State whether all such information will be provided to the commission, and if not to what extent and why.

A. The Company will contract with an independent program evaluator to assess the effectiveness of its educational program, including the quality and objectivity of materials, method of development, dissemination methods, the cost/benefit of the program, and the effectiveness of materials and information with customers and community organizations. Overall findings and conclusions will be made available to the Commission.

Q. Provide the following information for each business office and for the utility's operations in Pennsylvania as a whole, by average length of time and for the 10th, 25th, 50th, 75th, and 90th percentiles, for calendar years 1995 and 1996:

a) Installation of service - Length of time in days that it takes to complete the installation of new service after receipt of a customer application for service.

b) Response to telephone inquiries - length of time in minutes and seconds it takes to respond to a telephone inquiry into the business office (length of time on hold).

c) Response to billing complaints - length of time in days it takes to resolve billing complaints.

A. a) The length of time to install a new service is dependent upon a number of components: (1) the voltage and size (amperage class) of the service (the voltage and amperage will determine the number and size of the service conductors, the metering, and service entrance equipment); and (2) the class of customer, the geographic location, distance from the distribution electric lines, and the customer's estimated usage of electricity. These factors determine the type and length of the primary and service extension.

The following typical project types have been identified with minimum and maximum lengths of time to install service extensions. The minimum and maximum times account for the number of requirements that a project may contain. For example, a service extension may require right-of-way, tree trimming, and permits.

TYPE OF INSTALLATION	TOTAL TIME (DAYS)	
OH/UG service, transformer (Residential)	Min.	6
	Max.	41
1 Phase OH/UG extension (Residential <1,000 ft.)	Min.	14
	Max.	63
Multi Phase OH extension (Comm & Res >1,000)	Min.	30
	Max.	95
Residential URD Developments	Min.	43
	Max.	134
Comm & Industrial (3 Phase Pad Mounted Transf)	Min.	30
	Max.	72

b) The average length of time it took PP&L to respond to a telephone inquiry in 1995 was 45 seconds, and one minute 19 seconds in 1996. The Company does not track telephone inquiries on the basis of percentiles.

c) The Company does not measure the length of time it takes to resolve billing complaints. However, PP&L does have reports which indicate which billing disputes are open, and by tracking open billing disputes, the Company works to close them within 30 days of the initiation of the dispute. This information is also not tracked on the basis of percentiles.

NOTE: This number was omitted from Appendix A of the Commission's February 18, 1997 Order.

Q. Provide the following information for each field office and for the utility's operations as a whole for calendar years 1995 and 1996:

a) Appointments with customers - Number and percentage of appointments which the utility failed to keep, by month.

b) Meter Reading - Number of meters and percentage of meters that have not been read for at least 3 months, 6 months, 9 months, 12 months and more than 12 months.

c) Response to meter reading complaints - Length of time in hours it takes to resolve field complaints (out of service reports, downed wires, etc.) by average length of time and by 10th, 25th, 50th, 75th, and 90th percentiles.

d) Average interruption frequency index - average number of interruptions per customer per year. Provide the index value and the components of the calculation.

e) Average interruption duration index - Duration of interruptions experienced by those customers which experienced an interruption for the year divided by the number of such customers. Provide the index value and the components of the calculation.

f) Average interruption frequency index - Average number of interruptions for customers which experienced an interruption with respect to all customers which experienced an interruption. Provide the index value and the components of the calculation.

A. a) The Company currently does not keep a record of the number and percentage of appointments which it failed to keep. However, the Company is instituting measures to address this issue in 1997.

b) Currently, the Company tracks only those meters which have not been read for 3 months. This data is maintained for only one year.

During 1996, 5,623 meters were not read for 3 consecutive months. This represents 0.4% of the Company's meters.

c) The average length of time it took the Company to obtain a check read to resolve a customer concern was 2.6 days in both 1995 and 1996. For customers with outages, the average length of time to restore a case of trouble was 3 hours and 41 minutes in 1995 and 3 hours, 57 minutes in 1996.

d) Index Name: System Average Interruption Frequency
Index Value: .976
Components: Total number of customer interruptions -- 1,207,527
Total number of customers served -- 1,236,621

e) Index Name: Customer Average Interruption Duration
Index Value: 148 minutes
Components: Total of all customer interruption minutes --179,581,279
Total number of customer interruptions -- 1,207,527

f) Index Name: Customer Average Interruption Frequency
Index Value: 1.76
Components: Total number of customer interruptions -- 1,207,527
Total number of customers interrupted -- 685,382

Q. What standards are used by the company to establish when an interruption has occurred, when an interruption condition has ceased, when a field complaint has been resolved and when a billing complaint has been resolved?

A. The Company relies on two separate and distinct methods to establish when an interruption occurs:

1. When a circuit breaker that is SCADA controlled (the Company's Supervisory Control and Data Acquisition System) automatically opens interrupting service, an alarm is immediately generated in the Local System Operators (LSO) office. The local system operator then notifies the dispatcher of the interruption.

2. When customers call the Customer Contact Center (CCC) regarding loss of electric service, this information is entered into the Company's Customer Interruption Analysis System (CIA) which groups the calls, analyzes the most probable interrupted device, and sends a message notifying the dispatcher of the interruption.

The Company considers that an interruption condition has ceased when the employee assigned to the case of trouble reports that all interrupted customers have had their electric service restored. Individual customers may be restored before others depending on their location on affected circuits.

The Company considers that a field complaint is resolved when the Company has fully investigated the complaint and either corrective action was taken by the Company or the customer was given a final Company position. The Company's goal is to achieve agreement on the complaint between the Company representative and the customer.

The Company considers that a billing complaint is resolved when the Company has fully investigated the complaint and the customer was given a final Company position.

If the billing complaint was resolved during the initial telephone inquiry, the Company will have a record of the type of call in the customer contact history. If a further investigation is required, the account will be disputed, and the closed dispute will indicate resolution of the billing complaint.

Q. Does the company maintain a System Average Interruption Frequency Index (SAIFI), a Customer Average Interruption Duration Index (CAIDI), and /or a Customer Average Interruption Frequency Index (CAIFI)? If so, provide reports of such indices for the years 1995 and 1996 and discuss how such indices are used.

A. PP&L's maintains all of the performance indices listed above. The 1995 and 1996 values are:

	1995	1996
• SAIFI:	0.976	1.23
• CAIDI	148 minutes	131 mins.
• CAIFI	1.76	2.00

PP&L uses SAIFI, CAIDI, and other indices to evaluate distribution feeder performance. The evaluation helps field personnel identify poor performing feeders (circuits) that may require corrective action to improve performance. The data also is used to identify and correct specific problem areas where customers have been repeatedly interrupted.

These measures are defined in the response to Question RP-P.23.