ORIGINAL

BEFORE THE
PENNSYLVANIA PUBLIC UTILITY COMMISSION

BTL

PENNSYLVANIA PUBLIC UTILITY COMMISSION	:	
v.	:	Docket No. R-00943271
PENNSYLVANIA POWER & LIGHT COMPANY	:	

MAIN BRIEF
OF THE
OFFICE OF CONSUMER ADVOCATE
VOLUME II

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DATED: June 16, 1995

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A. PP&L's Gross Receipts Tax Claim Should Be Adjusted By $745,000.

In this proceeding, the Company calculated gross receipts tax expenses by applying the current gross receipts tax rate to its projected test year revenues from electric sales (excluding certain wholesale and contract sales) and late payment charges. PP&L Exh. Future 1, Sch. D-18, page 3. OCA witness Catlin adjusted gross receipts taxes to recognize that revenues which are not received (i.e., uncollectibles) are not subject to the tax. OCA St. 6 at 33. As shown on Schedule TSC-22, excluding uncollectibles revenues reduces the taxable revenue base by $16,932,000 on both a total company and Pennsylvania jurisdictional basis. Applying the current gross receipts tax rate to this amount reduces gross receipts tax by $745,000 and increases net income by $431,000. OCA St. 6, Sch. TSC-22.

In rebuttal, PP&L witness Bernini testified that Mr. Catlin's adjustment was "inappropriate" and "fundamentally unfair". PP&L St. 3R at 17-18. Mr. Bernini's criticism focuses on Mr. Catlin's recognition of the impact of the "real world" on PP&L's claim:

> In the real world, the Company will not collect all the revenues because a portion of these revenues will prove to be uncollectible. As a result, all else equal, the Company will not earn its allowed return. Mr. Catlin seizes upon this unfortunate fact of life to reduce the Company's GRT [Gross Receipts Tax] claim arguing that the Company will not have to pay GRT on revenues it does not collect.

PP&L St. 3R at 17.

The OCA submits that this criticism is without merit. The Company does not dispute that uncollectibles are not subject to gross receipts tax, but argues instead that because the Company is unable to collect all of its revenues, this adjustment is "unfair". This argument totally ignores the fact that in this proceeding, the Company is already seeking to recover any deficiency in its revenues due to uncollectibles from ratepayers in its uncollectible claim. As Mr. Catlin explained:

> Part of the revenue requirement in this case is an allowance for uncollectible revenues. The purpose of this allowance is to recognize that all of the revenues which the Company bills for service provided will not be collected from the customers to which it is billed. As a result, all customers are billed more than the true cost of providing service to make up for those customers who do not pay their bills.

OCA St. 6A at 13. (emphasis added). See also, Rebuttal Testimony of Michael J. Berish, PP&L St. 2R at 6. Thus, PP&L's basis for contesting this adjustment is already being addressed through the Company's claim for recovery of uncollectibles.

Although Mr. Bernini testified in rebuttal that: "[T]o the best of his knowledge, no adjustment to exclude uncollectibles from the gross receipts tax base has been adopted in any prior Company rate proceeding," the OCA submits that this argument does not preclude the adoption of this adjustment in this proceeding. PP&L St. 3R at 18. In Pa. P.U.C. v. West Penn Power Company, Docket No. R-00942986 (December 28, 1994), Mr. Catlin proposed this same adjustment to West Penn's gross receipt tax claim. The Commission adopted this adjustment stating:

> Mr. Catlin's adjustment was found to be correct in theory and amount and its adoption is recommended. We accept the recommendation of ALJ Corbett.

Id., slip op. at 80. The OCA submits that gross receipts taxes do not apply to uncollectible revenues. Therefore, uncollectibles should be excluded in calculating gross receipts taxes in this case. Applying the current gross receipts tax rate to PP&L's uncollectibles expense reduces gross receipts tax by $745,000 and increases net income by $431,000. OCA St. 6, Sch. TSC-22.

B. The Commission Should Reduce PP&L's Income Tax Expense By $2,548,000 To Reflect Consolidated Tax Savings.

1. Introduction

In this proceeding, PP&L calculated its pro forma tax expense on a stand alone basis and reflected no consolidated tax savings adjustment. However, as OCA witness Catlin explained:

> PP&L participates in the consolidated federal income tax return filed by the Company and its subsidiaries (the PP&L System). The filing of a consolidated income tax return results in utility corporations such as the PP&L System paying less income taxes in a given year than would be paid if each subsidiary filed a separate income tax return. This difference or consolidated tax savings results from the ability to take advantage of the losses of the parent and the unregulated subsidiaries on a consolidated basis by utilizing the income of the regulated utility (or utilities) to offset those losses.

OCA St. 6 at 36. The OCA submits that PP&L's failure to pass the savings resulting from its consolidated filing to its ratepayers violates the long-standing "actual taxes paid" doctrine and should be rejected. see Barasch v. Pa. Public Utility Commission, 507 Pa. 496, 491 A.2d 94 (1985). As shown on OCA St. 6, Schedule TSC-25,

this adjustment reduces federal income tax expense by $2,548,000 on a total company basis and $2,161,000 on a Pennsylvania jurisdictional basis.

2. Legal Standard

Pennsylvania's long-standing doctrine of allowing only "actual taxes paid" as an expense when determining a utility's rates requires a downward adjustment of PP&L's federal tax expense claim to reflect the savings realized by filing a consolidated tax return. Barasch v. Pa. Public Utility Commission, 507 Pa. 496, 491 A.2d 94 (1985). City of Pittsburgh v. Pa. Public Utility Commission, 187 Pa. Super. 341, 144 A.2d 648 (1958); City of Pittsburgh v. Pa. Public Utility Commission, 182 Pa. Super. 551, 128 A.2d 372 (1956). Where a utility is a subsidiary and files a consolidated tax return, it may not claim as an expense the amount it would have paid had it filed alone. Id.

In Barasch v. Pa. Public Utility Commission, 507 Pa. 561, 493 A.2d 653 (1985), the Supreme Court stated:

> Our Courts have consistently held it to be improper to include, for rate-making purposes, tax expenses which, because of the filing of a consolidated return, are not actually payable. All tax savings arising out of participation in a consolidated return must be recognized in rate-making, otherwise we would be condoning the inclusion of fictitious expenses in the rates charged to the ratepayers.

507 Pa. at 568, 493 A.2d at 656.

The Commission has also acknowledged that ratemaking recognition of consolidated tax savings is mandated as a matter of law. Pa. P.U.C. v. West Penn Power Company, 73 Pa. PUC 454, 499

(1990); see also, Pa. P.U.C. v. Philadelphia Suburban Water Co., 61 Pa. PUC 328, 356 (1986). The Commonwealth Court has confirmed the Commission's legal authority and obligation to recognize a utility's proportionate share of consolidated tax savings in the ratemaking process. Continental Telephone Co. of Pa. v. Pa. Public Utility Commission, 120 Pa. Commonwealth 25, 548 A.2d 344 (1988); Barasch v. Pa. Public Utility Commission, 120 Pa.Commonwealth 292, 548 A.2d 1310 (1988) (Rejection of the "pour-over" method for calculating consolidated tax savings of losses attributable to non-regulated member of a consolidated group for income tax filing purposes.)

3. PP&L's Pro Forma Tax Expense Claim Should Be Reduced By $2,548,000 To Reflect Consolidated Tax Savings Calculated In A Manner Consistent With Commission Precedent.

The Commission has approved the modified effective tax rate method as the appropriate way to calculate consolidated tax savings consistent with the actual taxes paid doctrine. Pa. P.U.C. v. Metropolitan Edison Co., 78 Pa. PUC 124, 183 (1993); 78 Pa. PUC 581 (Petition for Reconsideration granted on other grounds) (April 15, 1993); Pa. P.U.C. v. Philadelphia Suburban Water Co., 75 Pa. PUC 391, 424 (1991), 75 Pa. PUC 532, (Petition for reconsideration denied) (Nov. 27, 1991); Pa. P.U.C. v. National Fuel Gas Distribution Corp., Docket No. R-901670, slip op. at 94-95 (Dec. 24, 1990); Pa. P.U.C. v. West Penn Power Company, 73 Pa. PUC 454, 501 (1990).

OCA witness Catlin calculated the consolidated tax savings allocable to the Company utilizing what has become known as the modified effective tax rate method. As Mr. Catlin explained:

> Under this method, the first step is to determine the consolidated tax savings which result from the losses of the unregulated subsidiaries. These savings represent the difference between the aggregate taxes which the members of the PP&L System would have paid on separate returns compared to the taxes paid on a consolidated basis. The second step is to determine PP&L's share of the savings based on its taxable income compared to the taxable income of all members of the PP&L System with positive taxable income.

OCA St. 6 at 37-38.[61] As shown on Schedule TSC-25, this adjustment reduces federal income tax expense by $2,548,000 on a total company basis and $2,161,000 on a Pennsylvania jurisdictional basis.

In rebuttal, PP&L witness Bernini, recognized that this Commission has adopted consolidated tax savings adjustments in the past, even though Mr. Bernini philosophically disagrees with the

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[61] Mr. Catlin utilized the average consolidated tax savings for a three-year period in order to normalize the results and smooth out any fluctuations from year to year. He utilized the years ended December 31, 1993 and 1994 and the test year ended September 30, 1995 in his calculation. OCA St. 6 at 37. Mr. Catlin noted that:

> In developing my adjustment, I have excluded the taxable income of Interstate Energy Corporation (IEC) because IEC's net income fluctuates between gains and losses and because IEC is operated on a non-profit basis with the objective of having no return or profit. In addition, Pennsylvania Mines Corporation (PMC) had a tax loss of $21,616,200 in 1993 due to mine closing costs. I have treated this loss as abnormal and have utilized a normalized loss for PMC in 1993 equal to the average for 1994 and 1995.

Id. at 37-38.

Commission. However, he testified that such an adjustment was not appropriate in this proceeding because the majority of the losses which produce the savings are related to Pennsylvania Mines Corporation and Rushton Mining Company, which are no longer in operation. PP&L St. 3R at 14-17.

Mr. Catlin addressed Mr. Bernini's contention in his surrebuttal testimony as follows:

> The Company discontinued the operations of its coal mines in 1992 and ceased all mining-related operations in 1993. As a result, one-time closing costs were incurred by Pennsylvania Mines Corporation in 1993 and by Rushton Mining Company in 1992. In the years subsequent to the actual termination of mining operations, both of these companies have continued to incur tax deductible costs. This includes projected costs for the future test year of over $5.75 million. In response to OCA IV-122 and IX-31, PP&L has indicated that it has not prepared any projections of taxable income for its subsidiaries for calendar year 1995 or 1996. Therefore, the future test [year] represents the most current information available, and I have relied on data for 1993 through the future test year in developing my adjustment.

OCA St. 6A at 12 (emphasis added). The Company presented no evidence to support its position that these losses will not continue into the future, thus, it is appropriate to include these losses in the consolidated tax calculation these losses will not continue on a going forward basis. Mr. Catlin normaliized this adjustment to eliminate the one time mine closing costs. The OCA submits that the data provided by PP&L supports the adoption of Mr. Catlin's adjustment.

In addition, Mr. Bernini also argued that ratepayers had already received the tax savings related to the mining operations through lower Energy Cost Rate ("ECR") charges. PP&L St. 3 at 16-17. The OCA submits that this contention is unsupported by the record in this proceeding. Mr. Bernini stated that these savings may have occurred because costs that were incurred when the mines were in operation may not have been tax deductible until paid. However, Mr. Bernini did not provide any evidence to show that costs which are actually producing the tax losses now represent costs for which ratepayers have already received the tax benefits through the ECR. Thus, the Company has not established that PP&L ratepayers have already received these tax savings. Accordingly, consistent with well established Pennsylvania precedent requiring the recognition of a utility's proportionate share of consolidated tax savings in the ratemaking process, PP&L should be required to pass on the tax savings associated with its consolidated tax filing. This adjustment reduces federal income tax expense by $2,548,000 on a total company basis and $2,161,000 on a Pennsylvania jurisdictional basis. OCA St. 6, Schedule TSC-25.

C. The Company's Income Tax Expense Claim Should Be Reduced To Reflect The Exclusion Of Certain Additions To Taxable Income.

In this proceeding, PP&L presented a pro forma federal income tax claim of $179,642,000. PP&L Exh. Future 1-Revised, Sch. D-19. OCA witness Catlin eliminated three items which the Company included as additions to taxable income for purposes of calculating future test year income tax expense. OCA St. 6 at 33-35, OCA St.

6A at 13-14. Mr. Catlin explained these three adjustments as follows:

> First, I have eliminated the addition to taxable income for an ECR/FAC overrecovery of $9,690,000. This addition represents the amount by which fuel revenues are expected to exceed actual cash expenditures for fuel-related costs during the future test year. This overrecovery is caused by fluctuations in fuel revenues and fuel costs in combination with the fact that underrecoveries in one year are made up by recoveries in the following year (and vice versa). ...
>
> The second adjustment to taxable income which I have eliminated is an addition of $2,724,000 for refueling costs. This item represents the difference between the Susquehanna refueling outage costs which are reflected as a test year expense and the refueling outage costs which are deductible for income tax purposes. ... Therefore, like ECR/FAC over and under recoveries, refueling costs represent a short-term, temporary timing difference which should not be included in the calculation of income taxes used to set rates.
>
> The third item which I am proposing to eliminate from the calculation of test year income taxes is the addition to taxable income for the excess of test year uncollectibles expense over projected bad debt write-offs. I have accepted the Company's projected test year uncollectibles expense as representative of actual bad debt write-offs. To the extent the uncollectibles expense included in rates exceeds actual bad debt cost, either uncollectibles expense should be reduced or the uncollectibles reserve, which represents the excess of uncollectible expense over actual write-offs, should be deducted from rate base as a source of ratepayer supplied funds. Otherwise, ratepayers should receive a tax deduction for the full amount of the expense they pay.

OCA St. 6 at 33-35. The elimination of the additions to taxable income for ECR/FAC overrecoveries, refueling outage costs and bad

debt accruals reduces income taxes and increased net income by $6,058,000 on a total company basis. On a Pennsylvania jurisdictional basis, the reduction in income taxes and increase in net income was $5,810,000. Id. at 35, Sch. TSC-23.

In rebuttal, PP&L witness Bernini again criticized "Mr. Catlin's efforts to 'cherry pick' individual items in order to arbitrarily reduce the Company's rate request." PP&L St. 3R at 18. Mr. Bernini argued that Mr. Catlin should not make any adjustment to the Company's overall claim absent evidence that the Company's claim is unreasonable and that Mr. Catlin should have also considered potential upward adjustments. Id. at 19. In addition, Mr. Bernini contended that the bad debt adjustment was in error since the Company's bad debt claim "is not based on actual write-offs."[62] Id. at 20.

Mr. Catlin responded to Mr. Bernini's contentions that his adjustment to eliminate certain additions to taxable income represents an attempt to arbitrarily reduce the Company's rate request in his surrebuttal testimony. OCA St. 6A at 13-14. First, he accepted Mr. Bernini's adjustment related to the power plant inventory charge, noting that Mr. Bernini:

> ... cites the reduction to taxable income made by the Company for the power plant inventory-tax accounting change as an adjustment which also should have been eliminated as a short-term, temporary timing difference. In light of the information provided by Mr. Bernini in his rebuttal testimony, I agree that reduction

[62] Mr. Bernini did not specifically address the elimination of the ECR/FAC underrecovery or the refueling outage costs in his rebuttal testimony.

> to taxable income related to the power plant inventory tax accounting change should be eliminated. I have reflected this revision in my updated adjustment to eliminate certain additions and deductions to taxable income shown on Schedule TSC-23.

OCA St. 6A at 14. As shown on OCA St. 6A, Sch. TSC-23 (May 1995 Update), this adjustment reduces income taxes and increases Pennsylvania jurisdictional net income by $4,089,000.

In addition, Mr. Catlin responded to Mr. Bernini's argument regarding the elimination of the bad debt accrual:

> Mr. Bernini also argues that my adjustment to remove the addition to taxable income for the difference between the provision for uncollectibles and bad debt write-offs should not be accepted. His rationale is that the test year provision for uncollectibles is not based on actual write-offs during the test year. However, as noted in Mr. Berish's rebuttal testimony, the future test year level of bad debt write-offs is reflective of prior period revenues whereas the future test year provision for uncollectibles is reflective of the future test year level of revenues. Therefore, the test year provision for uncollectibles should be recognized as the tax deduction for ratemaking purposes because it represents the write-offs associated with test year revenues.

OCA St. 6A at 14. In fact, in response to cross-examination, PP&L witness Berish confirmed that the future test year level claim for uncollectibles reflects the future test year estimate of write-offs:

> Q. Am I correct that the uncollectibles accrual in the future test year is what the Company ultimately expects the write-offs related to the future test year revenues to be?
>
> A. What it tries to do is it tries to accrue an amount which the Company would estimate would

> be the write-offs applicable to the revenues it is recognizing on its books.

Tr. 2016. Thus, the evidence presented by the Company contradicts Mr. Bernini's argument.

Finally, the OCA submits that Mr. Bernini's arguments that Mr. Catlin's adjustment was 'cherry picking' and should not be adopted absent a showing that "the Company's overall income tax claim is unreasonable" ignores the evidence presented by Mr. Catlin. This evidence establishes that several of the elements that make up the Company's claim for taxable income are not appropriate and should be eliminated. Accordingly, the OCA submits any claim containing these items as additions to taxable income is on its face "unreasonable". As shown on OCA St. 6A, Schedule TSC-23 (May 1995 Update), eliminating the additions to taxable income for ECR/FAC overrecoveries, refueling outage costs, bad debt accruals and the reduction to taxable income related to the power plant inventory tax accounting change reduces income taxes and increases net income by $3,945,000 on a total company basis. On a Pennsylvania jurisdictional basis, the reduction in income taxes and increase in net income is $4,089,000.

D. Accruals For Tax Deficiencies Should Not Be Included in PP&L's Income Tax Expense Claim.

PP&L adjusted its calculated test year income tax expense to include accruals of $252,000 for a potential state income tax deficiency and $948,000 for a potential federal income tax deficiency. PP&L Exh. Future 1, Sch. D-19, page 2. OCA witness Catlin adjusted test year income tax expense to eliminate these

accruals. OCA St. 6 at 35. As Mr. Catlin explained these accruals should not be included in the Company's income tax claim because these costs are not known or certain:

> According to the response to OCA IV-120, "[t]he accruals for potential deficiencies in state and Federal income taxes are non-specific estimates of possible additional assessments arising out of Federal and state tax audits." The response goes on to indicate that "[t]he estimates are based on general approximation of audit adjustments..." As such, the Company's accruals for potential tax deficiencies do not represent a known and measurable cost. Moreover, since the accruals are based on non-specific estimates, there is no evidence or documentation to support any claim that any of the potential deficiencies are as the result of any tax benefits which were passed through to ratepayers. Therefore, these accruals are not properly reflected in rates.

Id. The OCA submits that the Company's claim for potential federal and state tax deficiencies is based only on the speculation that these assessments may occur, as such it is not a known or measurable cost.

This Commission has consistently and appropriately emphasized the principle that ratemaking claims be based on known and measurable costs that will occur, not on highly speculative estimates. Based on this principle, the Commission has rejected post-future test year expense claims in numerous proceedings. See Pa. P.U.C. v. West Penn Power Co., 73 Pa. PUC 454 (1990); Pa. P.U.C. v. National Fuel Gas Dist. Corp., 55 Pa. PUC 665 (1982).

The Company presented no rebuttal testimony on this issue. The OCA submits that the accruals for potential state and federal tax deficiencies should be removed from PP&L income tax

claim since these amounts are speculative and are not a known or measurable expense. As shown on OCA St. 6, Sch TSC-24, this adjustment reduces income taxes and increases net income by $1,200,000 on a total company basis and by $1,017,000 on a jurisdictional basis.

E. PP&L's Claimed Interest Deduction For Income Tax Expense Should Be Reduced By $806,000 To Properly Reflect The OCA's Rate Base And Capital Structure Recommendations.

An adjustment to the amount of synchronized interest included in the Company's income tax calculation is necessary in the event that the Commission determines a rate base value or capital structure different from those claimed by PP&L. OCA St. 6A, Sch. TSC-26 (May 1995 Update). As OCA witness Catlin explained:

> To determine the tax deductible interest for ratemaking, I have multiplied the OCA's recommended rate base by the weighted cost of debt included in the capital structure recommended by Mr. Kahal. This procedure synchronizes the interest component of the return on rate base to be recovered from ratepayers.

OCA St. 6 at 38.

The Company presented no rebuttal to this adjustment. An interest synchronization adjustment to reflect the weighted average cost of debt is a traditionally accepted ratemaking adjustment.[63] See e.g., Pa. Public Utility Commission v. Carnegie Natural Gas Company, 61 Pa.Commonwealth 436, 433 A.2d 938 (1981).

[63] Similar interest synchronization adjustments were adopted by the Commission in Pa. P.U.C. v. West Penn Power Company, 79 Pa. PUC 122, 166 (1993); and Pa. P.U.C. v. West Penn Power Company, Docket No. R-00942986 (December 28, 1994) slip op. at 80-81

The OCA submits, therefore, that the Company's interest deduction should be reduced by $806,000. This increases state and federal income taxes by $210,000 and $596,000, respectively. OCA St. 6A at 20, Sch. TSC-26 (May 1995 Update).

In addition, in Sch. TSC-27, OCA witness Catlin presented a proof of taxes utilizing the same format as the Company. Mr. Catlin started with the Company's tax calculation and identified the effects of the adjustments which he recommended to arrive at the income tax expense consistent with income at present and proposed rates. OCA St. 6 at 38, Sch. TSC-27 (May 1995 Update).

IX. COST OF CAPITAL

A. Introduction.

In this proceeding, PP&L has claimed a 10.22% overall cost of capital, including a 13.0% cost of common equity.[64] PP&L St. 12R at 2. As set forth in detail below, and as fully discussed in the testimony of OCA witness Matthew I. Kahal, the Company's claimed cost of capital is excessive. The OCA submits that PP&L's overall cost of capital is no more than 9.27%[65], which includes a common equity return of 11.1%. OCA St. 1A at 2, Sch. MIK-1 at 1 (May 1995 Update).

1. PP&L's Requested Cost Of Capital.

PP&L presented the testimony of Paul J. Moul to support its claimed cost of capital. PP&L St. 12 and 12R. Mr. Moul testified that: "... the Company should be allowed to implement rates based on a 10.22% overall rate of return ... ", including a 13.00% return on equity. PP&L St. 12 at 57. Although, in rebuttal, Mr. Moul noted that "long-term interest rates had declined about one-half percentage point (i.e., 0.50%)", he continued to recommend that the Company be allowed a 13.00% return on equity. PP&L St. 12R at 2-3.

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[64] PP&L witness Hill testified in response to cross-examination that the revenue requirement associated with each 100 basis points of the Company's return on equity claim is $40 million. Tr. 405.

[65] As discussed below, Mr. Kahal lowered his overall return by six points from 9.33% to 9.27% to include recognition of deferred taxes associated with reacquired debt.

In determining the overall cost of capital, Mr. Moul modified the capital structure estimated for PP&L as of September 30, 1995. PP&L St. 12 at 2. PP&L's claim is summarized below:

Type of Capital	Ratios	Cost Rate	Weighted Cost
Long Term Debt	46.53%	7.97%	3.71%
Preferred Stock	7.59%	7.31%	0.55%
Common Equity	45.88%	13.00%	5.96%
Total Capital	100.00%		10.22%

Source: PP&L St. 12 at 2.

2. OCA Recommendation.

OCA presented the testimony of Matthew I. Kahal, a financial consultant specializing in utility regulation. Mr. Kahal originally recommended an overall cost of capital for PP&L of 9.33%, including an 11.1% return on equity.[66] OCA St. 1 at 6, OCA St. 1A at 2, Sch. MIK-1 at 1. Mr. Kahal's recommendation incorporates the Company's proposed capital structure and cost rates with the exception of one small modification to adjust the long term debt balance to exclude $115.9 million of unamortized losses on debt acquisitions and the adjustment to the embedded cost of debt to reflect the deferred taxes related to reacquired debt.

[66] In the rebuttal phase of this case, the issue arose concerning deferred taxes associated with losses on debt reacquisition. PP&L witness Moul objected to rate base treatment but suggested as an alternative that the deferred taxes could be included as cost free capital in calculating the cost of debt. PP&L St. 12R1 at 4. Mr. Kahal found this alternative to be acceptable, as long as Mr. Moul's adjustment to capital structure ratios is not adopted. That is, Mr. Moul's inclusion of deferred taxes in rate of return is acceptable provided that PP&L's actual capital structure is used. This approach modifies Mr. Kahal's recommendation by reducing the cost of debt from 7.97% to 7.84% and overall return from 9.33% to 9.27%. Capital structure, cost of preferred equity and cost of common equity are unchanged.

Id. See Section C below. Mr. Kahal's recommendation is summarized below:

Type of Capital	Ratios	Cost Rate	Weighted Cost
Long Term Debt	47.56%	7.84%	3.73%
Preferred Stock	7.44%	7.31%	0.54%
Common Equity	45.00%	11.10%	5.00%
Total Capital	100.00%		9.27%

Source: OCA St. 1, Sch. MIK-1 at 1; OCA St. 1B at 9.

The OCA submits that the Commission should be aware that the projections that form the basis for the Company's projected capital structure rely, in part, on activity that will take place after the close of the record in this proceeding. Tr. 406-409. In response to cross-examination, PP&L witness Hill testified, that if the equity issuance occurred prior to a final Order in this proceeding, the Company would be willing to notify the Commission and the parties to this proceeding as to the date and the amount of any net proceeds of the issuance. Tr. 409. However, Mr. Hill also stated that even if the equity issuance did not take place that it would be "up to the Commission" to decide whether or not this issuance should be included in PP&L's capital structure. Tr. 408-409. Although the OCA accepts the Company's projected capital structure at this time, the OCA submits that it is incumbent upon the Company to demonstrate that the anticipated equity issuance occurred and the amount issued. Absent this information, the OCA submits that PP&L's capital structure should be revised to reflect the actual equity level.

OCA witness Kahal discussed the uncertain status of the planned equity issuance and its impact on PP&L's projected capital structure in his direct testimony::

> ... [a] public issuance is planned for August 1995, months after the close of the record. PP&L is obviously not committed at this time to this issuance, the desirability and timing of which may depend on market conditions. Consequently, the $100 million should be reflected in the PC approved capital structure in this case only if PP&L provides verification of the issuance prior to the Commission's final order in this case. Unless this is done, the Commission would be approving a hypothetical capital structure.

OCA St. 1 at 13 (emphasis added).

In rebuttal, PP&L witness Moul testified that PP&L Resources, PP&L's newly created parent Company, had authorized the issuance of new common shares. PP&L St. 12R at 11-12, Exhibit PRM-3, Sch. 1. However, as Mr. Moul testified in response to cross-examination, this authorization does not commit management to a stock issuance, nor does it specify the timing or the amount of the stock sale. Tr. 1796. Moreover, the OCA submits that even Mr. Moul recognized that the equity issuance was not finalized when he testified in response to cross-examination that: "it is the Company's intention" to notify the Commission and the parties in this case of the status of the equity issuance prior to the entry of the Commission's final Order. Tr. 1798. Mr. Moul also stated that it was "a reasonable presumption" to use the actual, not the projected, amount of the equity issuance in the Company's capital structure. Tr. 1798.

As OCA witness Kahal explained, in his surrebuttal testimony, the status of the equity issuance remains uncertain:

> Despite PP&L's current intentions, the amount and timing of an equity issuance remains uncertain. Therefore, PP&L should notify the Commission and the parties of the status of the issuance prior to the final order in this case so that the actual amount of such an issuance can be reflected in the approved capital structure. The projected $100 million of new equity should not be reflected in capital structure unless the issuance actually occurs and this notification is provided.

OCA St. 1A at 8 (emphasis added). Accordingly, the OCA submits that PP&L should be required to continue to update the Commission and the active parties of record on the status and amount of the planned equity infusion. Moreover, should the equity infusion not occur prior to the entry of the Commission's Final Order in this proceeding, PP&L's capital structure should be revised to exclude the projected equity infusion.

B. Standards Regarding Rate Of Return.

As a general rule, a public utility, whose facilities and assets have been dedicated to public service, is entitled to no more than a reasonable opportunity to earn a fair rate of return on its investment. The standard to evaluate what is a fair rate of return was established by the United States Supreme Court in Bluefield Waterworks & Improvement Company v. Public Service Commission of West Virginia, 262 U.S. 679, 693 (1923):

> The return should be reasonably sufficient to assure confidence in the financial soundness of the utility and should be adequate, under efficient and economical management, to raise the money necessary for the proper discharge of public duties.

The Bluefield Court found that the allowed rate of return should reflect:

> [A] return on the value of the [utility's] property which it employs for the convenience of the public equal to that being made at the same time on investments in other business undertakings which are attended by corresponding risks and uncertainties.

262 U.S. at 692.

Twenty one years later, the United States Supreme Court reviewed the issue of fair rate of return in Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591 (1944). In Hope, the Supreme Court held that a fair rate of return "should be commensurate with returns on investments in other enterprises having corresponding risks" while being sufficient "to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and attract capital." Id. at 603.

The United States Supreme Court affirmed a decision of the Pennsylvania Supreme Court which held that a Pennsylvania public utility is entitled to charge ratepayers a return of and on property currently used and useful in providing service to the public. see, Duquesne Light Company v. Barasch, 488 U.S. 299 (1989), affirming Barasch v. Pa. PC, 516 Pa. 142, 532 A.2d 325 (1987) ("Barasch"). In Barasch, the United States Supreme Court held that "whether a particular rate is 'unjust' or 'unreasonable' will depend to some extent on what is a fair rate of return given the risks under a particular rate system, and on the amount of capital upon which the investors are entitled to earn that return." 488 U.S. at 310.

The Commission set forth the principles for determining the fair rate of return on utility property as follows:

> A fair rate of return for a public utility, however, is not a matter which is to be determined by the application of a mathematical formula. It requires the exercise of informed judgment based upon an evaluation of the particular facts presented in each proceeding. There is no one precise answer to the question as to what constitutes the proper rate of return. The interests of the Company and its investors are to be considered along with those of the customers, all to the end of assuring adequate service to the public at the least cost, while at the same time maintaining the financial integrity of the utility.

Pa. P.U.C. v. Pennsylvania Power Company, 55 Pa. P.U.C. 552, 579 (1982); see also, Pa. P.U.C. v. National Fuel Gas Distribution Corporation, 73 Pa. P.U.C. 552, 603-605 (1990).

The OCA submits that it is necessary to evaluate the Company's request for a fair rate of return in the context of the recent trends in the capital markets. OCA witness Kahal detailed the trend in capital costs during the period of January 1984 through April 1995. OCA St. 1 at 9-12, Sch. MIK-2; OCA St. 1A at 3-4, Sch. MIK-2 at 6 (May 1995 Update). In his direct testimony, Mr. Kahal described the impact of these market conditions on his rate of return recommendation as follows:

> As this schedule indicates, capital costs moved downwards between 1984 and 1987 but then moved back up somewhat between 1987 and 1990. However, there has been a clear and pronounced downward trend in capital costs since 1990, with interest rates reaching their low point in the fall of 1993. Interest rates again have moved back up sharply since the October 1993 low point, but early 1995 capital costs

> still remain below the levels prevailing in most of the earlier years.

OCA St. 1 at 9. PP&L witness Moul recognized that "interest rates have trended lower since the fourth quarter of 1994 ..." and that "lower interest rates during the past five months have reduced my Risk Premium and CAPM cost rates", however, he did not revise his original return on common equity recommendation of 13.00% [67] PP&L St. 12R at 5. In addition, although Mr. Moul testified in response to cross-examination that as of May 23, 1995, the yields on long-term bonds had declined by a full percentage point since October 1994 when he had prepared his 13.0% recommendation, he did not reflect any change from his original recommendation. Tr. 1800.

In surrebuttal, Mr. Kahal responded to Mr. Moul's contention that his 13.0% return on equity recommendation, originally based on October 1994 data, should remain unchanged, explaining that:

> ... long-term interest rates have moderated significantly since year-end 1994. Despite the widely publicized problems in foreign exchange markets, conditions in capital markets so far this year have shown considerable improvement. This improvement appears to be based on the view that economic activity is slowing and inflation remains moderate.

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[67] Mr. Moul testified that he utilized October 1994 market data in his original cost of equity analysis. Tr. 1799. Mr. Moul updated his rate of return analyses in his May 1995 rebuttal testimony. The updated analyses utilized twelve months of market data through March 1995. PP&L St. 12R at 2; Tr. 1799.

OCA St. 1A at 3. See also, OTS St. SR-1 at 1-2. As will be shown below, the OCA contends that Mr. Kahal's recommendation of an 11.1 percent return on equity is fully supported by the evidence of record, including an analysis of recent trends and market data.

C. Capital Structure.

1. Introduction

In this proceeding, the OCA and PPLICA proposed adjustments to PP&L's capital structure. OCA St. 1 at 12-17; PPLICA St. 1 at 36-38. The following table summarizes the capital structure proposals of the parties:

Capital Structure	**PP&L**[68]	**OCA**[69]	**PPLICA**[70]
Long-Term Debt	46.53%	47.56%	47.13%
Preferred Stock	7.59%	7.44%	7.91%
Common Equity	45.88%	45.00%	44.96%
	100.00%	100.00%	100.00%

As noted above, OCA witness Kahal utilized the Company's actual capital structure projections, unlike PP&L witness Moul, who modified PP&L's actual capitalization data to permit recovery of losses on reacquired debt.[71] OCA St. 1 at 13-17. As discussed

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[68] PP&L's capital structure is a projected capital structure as of September 30, 1995. PP&L St. 12 at 2.

[69] OCA St. 1, Sch. MIK-1 at 1.

[70] PPLICA witness Baudino utilized the Company's actual September 30, 1994 capital structure. PPLICA St. 1 at 37, Table 4.

[71] As Mr. Kahal explained, these losses are primarily call premiums incurred by the Company in the process of refinancing outstanding high cost debt issues after 1986 when long-term interest rates fell dramatically relative to interest rates in the early and mid 1980s. OCA St. 1 at 13.

below, Mr. Kahal disagreed with Mr. Moul's decision to reduce the debt balance by $115.9 million, which results in a more expensive capital structure. Id. at 14. In addition, Mr. Kahal has recommended that the Commission should adjust PP&L's cost of debt to reflect the balance of accumulated deferred income tax ("ADIT") on the reacquired debt.

2. The Commission Should Reject Mr. Moul's Adjustment To The Company's Actual Capital Structure.

In this proceeding, PP&L witness Moul adjusted the Company's actual projected capital structure by deducting $116 million from the Company's actual debt balance to allow recovery of losses on reacquired debt. PP&L incurred debt reacquisition costs [call premiums] over a period of years in order to lower its cost of debt. Those expenses were financed with whatever mix of capital the Company chose to use at the various times that the reacquisitions occurred. Unlike a typical expense, however, the reacquisition costs were booked by PP&L as a "regulatory asset" to be recovered in future rates and therefore they contribute to the Company's common equity balance. OCA St. 1A at 7.

Mr. Kahal explained the modification to PP&l's actual capitalization data as follows:

> Mr. Moul's treatment provides the Company both a return of and a return on these expenditures in three ways. First the annual amortization of the losses (net of some minor gains) is added to interest expense. This total about $7.2 million. Second, the unamortized balance of $115.9 million is subtracted from the long term debt balance when computing the embedded cots of debt. The combination of these two actions increases the embedded cost of debt

> from 7.40% to 7.97%. Third, Mr. Moul also subtracts the $115.9 million of unamortized losses from the debt balance for capital structure purposes.

OCA St. 1 at 13-14. As Mr. Kahal testified it is this third adjustment that serves to artificially inflate the equity portion of capital structure, thus increasing the overall pre-tax rate of return. Id. at 14. The OCA does not object to PP&L receiving a return of and a return on the call premiums and that cost recovery should take place through rate of return. OCA St. 1 at 14. However the OCA does object to Mr. Moul's adjustment to the Company's actual capital structure to reduce the debt balance by approximately $116 million. The OCA submits that the $115.9 million of unamortized losses should not be subtracted from the debt balance for capital structure purposes.

Mr. Moul's adjustment to the capitalization data provides PP&L roughly $24 million[72] of cost recovery on a total company basis.[73] Id., Sch. MIK-1 at 2. Mr. Kahal testified that this

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[72] As Mr. Kahal explained, Mr. Moul calculated his adjustment as follows:

> First, Mr. Moul shows on his Schedule 14 a pre-tax rate of return of 14.96%. Removing the loss on reacquisition, his pre-tax rate of return declines to 14.56% or a 0.4% reduction. If we assume a $6.0 billion rate base on a total company basis, the revenue requirement cost of Mr. Moul's treatment totals to roughly $24 million (i.e., $6 billion x 0.4%).

OCA St. 1 at 16.

[73] Mr. Kahal explained that:

(continued...)

adjustment overcharges ratepayers by about $8 million ($24 million minus $16 million). Id. at 16.

The OCA recognizes that the Commission in the past has allowed utilities to adjust their capital structures to allow recovery of the call premium expense through an amortization and to earn a return on that unamortized balance of that expense. Pa. P.U.C. v. National Fuel Gas Distribution Corporation 67 Pa. PUC 264, 324-326 (1988); Pa. P.U.C. v. National Fuel Gas Distribution Corporation 73 Pa. PUC 552, 606-607 (1990) ("NFGD 1990"). In NFGD 1990, the Commission allowed the utility "full recovery of the Company's expenses and a return on such expenses in order to provide an incentive to reduce the embedded cost of debt." Id. at 607.

However, because these refinancings occurred during the ten years between rate cases shareholders benefitted. As. Mr. Kahal testified:

> PP&L shareholders have been able to enjoy many years of savings from these refinancings since PP&L has not had a rate case since 1985. These substantial interest expenses savings due to refinancings undoubtedly increased PP&L's profits and higher profits translate

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[73](...continued)
For simplicity of exposition, all calculations are total Company, and I assume rate base is equal to capitalization. It is most convenient to present results this way since rate of return (and capital structure) are total Company concepts. Presenting the analysis on a jurisdictional basis would produce smaller numbers but would not affect the concept or comparisons discussed herein.

OCA St. 1 at 15.

> into higher retained earnings and thus common equity. Unless one makes the unrealistic assumption that every dollar of profits translates into an additional dollar of common dividends, the refinancings very likely have resulted in a higher per books common equity balance than would exist absent the refinancings.

OCA St. 1 at 15. The OCA submits that PP&L should not be given an additional $8 million in incentives for refinancing. The OCA submits that Mr. Kahal's adjustment provides PP&L with full cost recovery of $16 million, including a debt return on the unamortized balance of call premiums. Ratepayers should not be required to pay an additional $8 million. Thus, the OCA submits that the Commission's findings in the NFGD decisions should be reconsidered in this proceeding.

Moreover, the adjustment proposed by Mr. Moul is not consistent with PP&L's financial balance sheet. In fact, PP&L witness Hill testified in response to cross-examination that PP&L does not subtract the $115.9 million from debt balance for financial reporting purposes. Tr. 414. Further, as Mr. Kahal testified:

> It is also not the case that this adjustment is needed in order to keep the PP&L capital structure in some sense "neutral" with respect to the refinancings. The call premiums when incurred were expenses to PP&L, expenses incurred in order to reduce interest costs by an even larger amount. The call premiums, however, did not reduce common equity when incurred the way an incremental expense normally would. This is because PP&L has created a "regulatory asset" on its books, reflecting the unamortized balance of the reacquisition losses (call premiums).

OCA St. 1 at 14-15. Accordingly because the call premiums are a regulatory asset on the PP&L balance sheet, the common equity balance is unaffected by the refinancings.

In rebuttal, Mr. Moul objected to Mr. Kahal's capital structure adjustment testifying that:

> Although Mr. Kahal recognizes that recovery of the annual cost should be reflected in the Company's cost of debt, he unfairly lowers the Company's equity ratio by failing to recognize the Company's adjustment.

PP&L St. 12R at 8. Mr. Kahal responded to Mr. Moul in his surrebuttal testimony, noting that:

> Contrary to the impression in Mr. Moul's testimony, I am <u>not</u> lowering PP&L's equity ratio. Rather, I propose to use in this case PP&L's projected <u>actual</u> capital structure ratios at 9/30/95. It is Mr. Moul who seeks to alter the actual, per books capital structure ratios. This is an adjustment which investor analysts (e.g., credit rating agencies) do not make.

OCA St. 1A at 6. Moreover, as Mr. Kahal explained:

> ... no reduction to common equity occurred from the losses on reacquisition, except as amortization takes place. However, since annual interest expense savings from refinancings greatly exceeds the annual amortization, the probable net effect is an <u>increase</u> in PP&L's common equity. This increase to profits and hence equity could take place because PP&L has not had a rate case during the intervening period, and therefore the net interest expense savings (i.e., net of the amortizations) have flowed 100 percent to shareholders. From this perspective, an adjustment to even <u>further</u> increase the equity ratio above its actual level -- as Mr. Moul argues -- makes no sense.

OCA St. 1A at 7. The OCA submits that the Commission should reject the Company's adjustment to its projected equity ratio. Adoption of Mr. Moul's adjustment results in ratepayers being overcharged by $8 million.

3. PP&L's Debt Cost Should Be Adjusted Using The Company's Actual Capital Structure To Reflect The Effect Of The Accumulated Deferred Income Taxes Related To The Loss On Reacquired Debt.

After reviewing Mr. Moul's capital structure adjustment, OCA witness Catlin in his direct testimony, recommended an adjustment to rate base because PP&L had not recognized the balances of accumulated deferred income taxes ("ADIT") associated with the loss on reacquired debt discussed above. OCA St. 6 at 6. OCA witness Kahal explained the basis for this adjustment:

> ... PP&L incurred call premiums (losses on debt reacquisition) over a period of years, principally between 1986 and 1993, when refinancing its high cost debt. In addition to receiving large net interest expense savings in those years (which went to shareholders), PP&L also received immediate tax write-offs. Those losses could be expensed for tax purposes in the year incurred. For accounting purposes, those losses are treated as a regulatory asset on a pre-tax basis and amortized over a very long period of time. Per Mr. Moul's proposal, PP&L recovers the amortizations and a return on the unamortized balance in rates through higher interest expense, i.e., a higher embedded cost of debt. With interest synchronization, the dollar amount of PP&L's original tax savings is returned to ratepayers very gradually over time.

OCA St. 1B at 6.

In rebuttal, Mr. Moul opposed adoption of Mr. Catlin's rate base adjustment, but suggested as an alternative that recognizing:

> ... deferred income taxes related to the call of high cost debt would require a modification to the Company's capital structure ratios and embedded cost of debt.

Id., Exh. PRM-4. As shown on that exhibit, recognizing the deferred tax provisions results in the following capital structures:

Type of Capital	Ratios	Cost Rate	Weighted Cost
Long Term Debt	46.96%	7.84%	3.68%
Preferred Stock	7.53%	7.31%	0.55%
Common Equity	45.51%	13.00%	5.92%
Total Capital	100.00%		10.15%

Source: PP&L ST. 12R1, Exh. PRM-4, Sch. 2.[74] In response to cross-examination, Mr. Moul testified that he was not recommending adoption of this revised capital structure since it was his position that the deferred taxes associated with call premiums should be completely disregarded. Tr. 1794-1795.

In surrebuttal, OCA witness Kahal testified that Mr. Moul's alternative which results in a modification to the Company's capital structure was acceptable. However, Mr. Kahal conditioned adoption of this adjustment on the use of PP&L's actual capital structure, not the adjusted capital structure presented by Mr. Moul in this proceeding. OCA St. 1B at 1-2. Thus, as Mr. Kahal

[74] The OCA notes that Mr. Moul's proposed capital structure adjustment utilized the capital structure that he recommended in this proceeding.

testified if the Commission accepts his recommendation to utilize PP&L's actual capital structure:

> I find acceptable Mr. Moul's recognition of deferred taxes in the cost of debt in lieu of rate base. The deferred tax recognition lowers the embedded cost of debt from 7.97 to 7.84 percent, and lowers my overall rate of return from 9.33 to 9.27 percent. My capital structure ratios are not altered by this adjustment.

Id. at 9. Accordingly, the OCA submits that the Commission should utilize the Company's actual capital structure with a modification to the embedded cost of debt to recognize the accumulated deferred taxes associated with the loss on reacquired debt.

The OCA submits that Mr. Moul's suggestion to "disregard" the balance of ADIT on reacquired debt results in the Company's failure to recognize a source of non-investor supplied capital. Therefore, the OCA submits that the Commission should adopt either a) the 7.84% cost of debt with the Company's actual capital structure, or b) if Mr. Moul's modified capital structure is accepted, Mr. Catlin's rate base adjustment. Adoption of one of these two options is essential in order to give proper ratemaking treatment of these funds.

4. If Mr. Moul's Adjusted Capital Structure Is Adopted, PP&L's Rate Base Should Be Adjusted To Reflect The Balance of Accumulated Deferred Income Tax Associated With The Loss On Reacquired Debt.

If the Commission rejects Mr. Kahal's recommendation to use the Company's actual capital structure with an adjustment to the cost of debt to reflect the accumulated deferred income taxes

associated with the loss on reacquired debt, the OCA submits that Mr. Catlin's original rate base adjustment should be adopted and deferred taxes must be given rate base offset treatment.

The OCA submits that, as discussed above, the Company's practice of reacquiring debt gave rise to a tax timing difference, and hence, deferred taxes. In other words, shareholders have already received the tax savings but ratepayers will only see the tax savings gradually over the next 10 to 15 years. Id. As Mr. Catlin testified the Company accomplished this by:

> ... both including the amortization of the loss as an interest cost and deducting the unamortized balance of the loss from the balance of outstanding debt used to calculate the weighted cost. However, nowhere in its calculations has PP&L recognized that it received an immediate tax benefit for the loss which served as a source of cost-free capital. Therefore, deducting the balance of ADIT on reacquired debt from rate base is necessary to recognize this balance as a source of non-investor supplied capital.

OCA St. 6 at 7. As shown on OCA St. 6, Sch. TSC-4, adoption of this adjustment reduces total Company rate base by $47,863,000 and reduces Pennsylvania jurisdictional rate base by $40,838,000.

In rebuttal, PP&L witness Moul argued that Mr. Catlin's adjustment should be rejected because ratepayers:

> will begin to bear the costs of amortizing the remaining call premiums and will receive the benefit of the associated tax deduction in the Company's pro forma income tax calculation.

PP&L St. 12R1 at 1-3. Mr. Moul also argued that Mr. Catlin's adjustment is inappropriate because "there were no customer funds utilized to undertake the call of the Company's high cost debt ..."

and that customers will receive the tax benefit through "an interest synchronization technique". PP&L St. 12R1 at 1-2. Mr. Kahal noted in his surrebuttal testimony that this assertion is only partly true:

> The call premiums were financed partly by investors (i.e., about 60 to 65 percent) and partly by the U.S. Treasury due to the tax write-off. PP&L should only receive a return on the portion of the unamortized balance financed by investors. That is why deferred taxes must be recognized. Mr. Moul's other argument that ratepayers receive their appropriate share of the tax savings through interest synchronization misses the essential point. The issue with the deferred taxes is not <u>whether</u> the tax benefit dollars will be passed on to ratepayers but <u>when</u>.

OCA St. 1B at 7. The OCA submits that the Company agrees that the deferred taxes exist, the remaining issue is whether the timing difference should be flowed through to ratepayers as is the normal practice for deferred taxes.

Mr. Moul next argued against Mr. Catlin's rate base because it "would give customers the benefit of the tax deduction up front..". PP&L St. 12R1 at 2-3. In response, Mr. Kahal testified:

> Mr. Catlin's recognition of deferred taxes does not front load the tax benefit for ratepayers, as Mr. Moul asserts. Rather, its purpose -- as is always the case with deferred tax recognition -- is to ensure that the Company only receives a return on the investor-financed portion of the asset, not on the portion financed by the taxing authority or ratepayers.

OCA St. 1B at 8. The OCA submits that limiting the Company's return to the shareholder financed portion is an appropriate ratemaking treatment of these funds.

Finally, Mr. Moul seems to be arguing that since unamortized call premiums are not given rate base recognition, Mr. Catlin's adjustment should be rejected. However, as Mr. Kahal testified because Mr. Moul "subtracts the unamortized balance from debt balance for capital structure purposes he is in effect giving that balance a combined debt plus equity return, i.e., the dollar equivalent of putting it in rate base." OCA St. 1B at 8. As Mr. Kahal explained:

> ... Mr. Moul's proposed rate of return treatment gives PP&L the same dollar amount as if it received rate base treatment on the unamortized balance. By including the call premium adjustment in rate of return, PP&L hides the fact that it is seeking a rate base equivalent rate of return (including income tax gross up) for an expense item.

Id. at 8-9. Thus, the OCA submits that should Mr. Moul's adjustment be adopted, the OCA's recommended adjustment to rate base should be adopted.

5. Conclusion.

The OCA submits that in order to recognize the Company's claim for loss on reacquired debt, and to avoid ratepayers being overcharged by $8 million, the Commission should utilize the Company's actual capital structure. The 7.84% debt cost rate provides PP&L both a return of and a return on call premiums. The 7.84% debt cost rate also provides for recognition of the deferred taxes associated with call premiums and thus, rate base recognition

of the accumulated deferred income taxes associated with call premiums is not required.

However, in the event that the Commission adopts Mr. Moul's adjusted capital structure, the OCA submits that PP&L's rate base must be adjusted to reflect the accumulated deferred income taxes as a rate base offset.

D. Cost Of Debt

As discussed above, the OCA submits that PP&L's long-term debt cost rate should be set at 7.84% to recognize the accumulated deferred income taxes associated with reacquired debt. OCA St. 1B at 9.

E. Cost of Common Equity

1. PP&L's Cost Of Common Equity Is No More Than 11.10 Percent.

a. Introduction

In this proceeding, as in most contested rate proceedings, the calculation of the Company's cost of common equity was the subject of substantial disagreement. The common equity cost rate recommendations presented by the Parties are as follows:

PP&L	(Moul)	13.0%
OTS	(Deardorff)	10.63%
OCA	(Kahal)	11.10%
PPLICA	(Baudino)	10.85%

All four witnesses relied, to a differing extent, on the Discounted Cash Flow ("DCF") analysis in determining the fair rate of return on common equity for PP&L. PP&L St. 12 at 3; OCA St. 1 at 21; OTS St. 1 at 16, PPLICA St. 1 at 14. However, in addition to utilizing the DCF method in determining PP&L's fair rate of return on common

equity, PP&L witness Moul also utilized the Risk Premium ("RP"), the Capital Asset Pricing Model ("CAPM") and the Comparable Earnings analyses to arrive at his 13.0 cost of equity recommendation. PP&L St. 12 at 3, Exh. PRM-1, Sch. 1.[75]

In rebuttal, PP&L witness Moul criticized the OCA, OTS and PPLICA return on equity recommendations arguing that no single method, such as the DCF method should be used to measure PP&L's cost of common equity. PP&L St. 12R at 12. Mr. Moul referenced a 1993-94 NARUC report to support his argument that the DCF's wide use does not justify "exclusive use of the DCF." Id. at 14.

In surrebuttal, Mr. Kahal responded to Mr. Moul's criticism of the DCF model, testifying that:

> The DCF model is actually a very flexible methodology that can be adapted to analyze a number of growth scenarios. This flexibility, along with theoretical soundness and ease of use, account for its overwhelming popularity.

OCA St. 1A at 12. In particular, Mr. Kahal noted that Mr. Moul's reliance on a NARUC study survey to discount the DCF's reliability and acceptance by other Commissions was misplaced.[76] Id. at 13.

The Discounted Cash Flow ("DCF") method is the most widely used approach to determine return on equity in public utility rate cases and has been used by the Commission and many

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[75] OCA witness Kahal performed a Risk Premium analysis and a sampling of CAPM results in order to respond to Mr. Moul's analyses. OCA St. 1 at 49. Mr. Kahal's 11.1% recommendation is based solely on his DCF analyses. Id.

[76] Mr. Moul testified in response to cross-examination that the NARUC study identified the DCF as the most widely used method among regulatory Commissions. Tr. 1802-1803.

other state commissions for many years. The Commission has placed primary reliance on the results of validly conducted DCF studies in determining the appropriate cost of common equity in numerous proceedings in recent years. See, e.g., Pa. P.U.C. v. Roaring Creek Water Company, 150 PUR4th 449, 483-487 (1994); Pa. P.U.C. v. York Water Co., 75 Pa. PUC 134, 153-167 (1991); Pa. P.U.C. v. Equitable Gas Co., 73 Pa. PUC 345-346 (1990); Pa. P.U.C. v. Philadelphia Suburban Water Co., 71 Pa. PUC 593, 623-632 (1989).

The OCA recognizes that the Commission in Pa. P.U.C. v. West Penn Power Company, Docket No. R-00942986 (December 28, 1994) continued to utilize the DCF method in calculating West Penn's return on equity despite taking "... administrative notice, however, that our final allowance is not inconsistent with the results produced by those [Risk Premium] methodologies." slip op. at 99. However, in a recent Order, the Commission discussed its continued reliance on the DCF methodology:

> We have, in recent years, relied primarily on the DCF methodology in arriving at our authorized return on common equity. As correctly observed by the ALJ, we rejected the use of the risk premium and CAPM methods in the Company's last rate case at Roaring Creek 1994, supra, as well as in Pennsylvania Power Company, supra. There is no evidence of record in the proceeding before us which convinces us that such methodologies should be used in this proceeding. Accordingly, we will continue to rely primarily on the DCF methodology and informed judgement. Pa. P.U.C. v. West Penn Power Company, 73 Pa. PC 454, at 502-503 (1990).

Pa. P.U.C. v. Roaring Creek Water Company, Docket No. R-00943177, slip op. at 46 (May 31, 1995). The OCA submits that the DCF

analyses performed by Mr. Kahal conform with the standards adopted by the Commission.

As discussed below, the OCA submits that the Commission should not award PP&L the opportunity to earn a return on common equity which exceeds 11.1 percent. The OCA further submits that in arriving at its final conclusion, the Commission should place primary reliance on the various DCF study results of OCA witness Kahal. The OCA submits that Mr. Kahal's DCF results, which are based on valid applications of the DCF theory, should be adopted for the purposes of ratemaking in this proceeding. Moreover, the 13.0% cost of common equity recommended by PP&L witness Moul should not be utilized by the Commission in determining PP&L's cost of common equity. Mr. Moul's cost of equity results are overstated and based on several methodologies that have repeatedly been rejected by this Commission.

2. Mr. Kahal's DCF Analysis

a. Introduction

An explanation of the DCF method was provided by Mr. Kahal in his direct testimony:

> The basic formulation of the DCF method is probably the most widely used approach to return on equity determinations in utility rate cases and has been relied upon in past cases by this Commission. This model states that the percent return expected (and therefore required) by investors equals the expected dividend yield (annualized dividend divided by market price) plus the expected annual rate of growth of dividends per share. Moreover, this formulation requires dividends, earnings and book value all to grow at the same rate for the indefinite future. This model is generally referred to as the constant

> growth model, because for the sake of simplicity, it assumes that the future rate of growth will be constant. Although these assumptions may appear to be rather restrictive, for relatively stable companies, such as most public utilities, the model is an acceptable approximation of reality.

OCA St. 1 at 22. Mr. Kahal explained that it is the growth component of the DCF model that is most often subject to debate:

> The dividend yield is directly observable and, except for some minor differences in calculation procedure and timing, it is usually not a major source of controversy. However, investor expectations of the long-run rate of growth cannot be observed and instead must be inferred by some sort of analytical process. Because a great deal of judgment and analysis is involved with the growth determination, it is often subject to considerable debate.

Id. Mr. Kahal then detailed the various methods employed by analysts to determine the growth component in the DCF formula. Id. at 22-24. Mr. Kahal explained his DCF analysis as follows:

> My DCF studies consider and make use of all relevant information, including historical growth rates, published growth rate projections and earnings retention growth. In conducting my DCF study, I prefer to begin with an analysis of earnings retention growth, using recent historical experience as a starting point. While historical data are relevant to investors, it is unreasonable to assume that the future outlook must be no different than recent past history.

OCA St. 1 at 23-24.

To estimate the cost of common equity for PP&L, OCA witness Kahal applied the DCF model to PP&L, and to two proxy groups of electric utility companies. Mr. Kahal applied the DCF to PP&L, the proxy group of 8 companies selected by Mr. Moul ("Moul

proxy group") and to an alternative group of 15 companies ("primary proxy group").[77] OCA St. 1 at 21, Sch. MIK-3.

Mr. Kahal explained the advantage of using "proxy" groups of comparable companies in performing a DCF analysis:

> In conducting a single company DCF analysis, there is always the risk that the historical and market data for that firm may be atypical of what investors could reasonably expect in the future. Employing a group of firms has the advantage of averaging out the unusually high and low observations. I note that Mr. Moul, like most analysts, relies to a substantial degree on the proxy group approach.

OCA St. 1 at 24. In this proceeding, Mr. Moul selected a proxy group of eight electric companies, while Mr. Kahal developed a proxy group of fifteen electric companies. Mr. Kahal detailed the differences between the two proxy groups as follows:

> There are two primary reasons why our groups differ. First, Mr. Moul disqualified an electric utility if it did not operate in or contiguous to Pennsylvania. My proxy selection method does not use geographic location as a screen since there is no evidence that it is critically important to investors (or not reflected in other, broader

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[77] Mr. Kahal had originally utilized 17 companies in his proxy group. However, as he explained in his surrebuttal testimony:

> ... in my update I have eliminated two of the original 17 companies from my primary proxy group (Union Electric and Southern Company) since those two companies are rated "1" for Safety. My selection criteria include only those electric utilities rated "2" or "3" for Safety by the Value Line Investment Survey. These two exclusions have the effect of slightly increasing the group average dividend yields.

OCA St. 1A at 2.

> risk measures). Second, I restricted my group to nuclear utilities, whereas several of Mr. Moul's utilities have no nuclear operations. Despite these differences, I believe both proxy groups are generally valid proxies in this case for PP&L. My group does have the advantage of being larger and more comprehensive.

OCA St. 1 at 21. Mr. Kahal also performed a DCF analysis of PP&L on a stand-alone basis. Although, as Mr. Kahal testified he used "this study only as a check because I believe that proxy groups -- if correctly selected -- should produce more reliable, stable estimates than single company DCF studies." OCA St. 1 at 35.

In his direct testimony, Mr. Kahal presented DCF cost of equity studies based upon market data extending through February 1995, i.e., September 1994-February 1995 averages. These studies were updated in his surrebuttal testimony, to utilize data through April 1995. OCA St. 1A at 2. In surrebuttal Mr. Kahal recalculated the dividend yields for the two proxy groups and for PP&L on a stand-alone basis, obtaining the following opportunity equity cost rate results:

DCF Study Results

	Range	Midpoint
Moul Group	10.7 - 11.2%	11.00%
Primary Group	10.6 - 11.6%	11.10%
PP&L	11.1 - 11.6%	11.30%
Average	10.8 - 11.5%	11.1%

Source: OCA St. 1 at 21-37, OCA St. 1A at 2-3, Schs. MIK-5, MIK-6, MIK-7 (May 1995 Updates).

As set forth below, the OCA submits that these results fully support Mr. Kahal's 11.1% return on equity recommendation in this proceeding.

b. The Moul Proxy Group Study.

Mr. Kahal applied the DCF analysis to Mr. Moul's proxy group. As Mr. Kahal noted:

> ... this group includes the eight proxy companies selected by Mr. Moul. He began with the population of electric utility companies within the Compustat data base serving Pennsylvania or a state contiguous to Pennsylvania. He then excluded all companies which have reduced or eliminated their dividend and have operating revenues below $750 million.

OCA St. 1 at 24. Mr. Kahal began his dividend yield analysis for Mr. Moul's proxy group by using the Standard & Poor's Stock Guide to compute the average stock price for each company for the six month period ending in April 1995.[78] OCA St. 1 at 26; OCA St. 1A at 3. Mr. Kahal also determined the quarterly dividends for each company which he then annualized and divided by the average stock price for each of the six months. OCA St. 1 at 26; OCA Exhibit Schedule MIK-4 (May 1995 Update). This resulted in a six month average dividend yield of 7.38%, and a 7.52% dividend yield for the most recent three months. Id. Mr. Kahal then adjusted the dividend yield upwards by two calendar quarter's growth in dividends so that the dividend yield will be based upon the dividend the investor expects to receive during the first year after purchase of the stock. This resulted in an adjusted dividend

[78] Mr. Kahal's original study employed data from November 1994 through February 1995. OCA St. 1 at 26.

yield of 7.7% (i.e., 7.5% x 1.02). OCA St. 1 at 27, Schedule MIK-5 (May 1995 Update).

Mr. Kahal obtained his growth rate range of 3.0% to 3.5% by relying substantially on the earnings retention method,[79] but he also evaluated evidence of historical growth rates and published analyst's forecasts. OCA St. 1 at 27-31.[80] As shown on page 2 of OCA Sch. MIK-5, Mr. Kahal compiled data on book common equity and the retention rate for each year from 1989 through 1993. He then computed historical averages for the last five years and the last ten years, as well as an "optimistic case." Id. at 27-28.

Mr. Kahal reported the results of his analysis:

> The average ROE was 11.8 percent during the last five years and 13.2 percent during the past ten years. The retention rates during the past five- and ten-year period averaged 11.8 to 20.1 percent. In combination, these parameters produce implied

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[79] As Mr. Kahal explained:

> In using the earnings retention (or growth through retained earnings) approach, it is necessary to take a prospective orientation. That is, the analyst must formulate a judgment regarding the company's expected future profitability and propensity to reinvest those profits. In doing so, the historical performance of the company provides a starting point in formulating those judgments.

OCA St. 1 at 24.

[80] Mr. Kahal testified:

> The earnings retention method is consistent with the DCF model because it results in identical growth rates for earnings, dividends and book value and because the single growth rate it produces is constant.

OCA St. 1 at 27.

> growth of 1.4 percent (i.e., 11.8 x 11.8%) to 2.7 percent (i.e., 13.2 x 20.1%). Under the optimistic case, the ROE was 15 percent, the retention rate was 29.8 percent, producing internal growth of 4.5 percent. The optimistic case, however, is of limited relevance because it reflects conditions only from the mid 1980s (i.e., 1985, 1986 and 1987) when allowed returns were much higher than currently.[81]

OCA St. 1 at 28. Mr. Kahal went on to state:

> Given past performance and recent return on equity awards to electric utilities, a reasonable expectation for the proxy companies would be an average future return on book equity of about 12.0 percent and a retention rate of about 20 percent. These parameters imply retained earnings or internal growth of about 2.4 percent (e.g., 12.0% x 20% = 2.4%). As Schedule MIK-5, page 2 of 6 indicates, the historic internal growth during the last five years is weaker than that, i.e., 1.4 percent. The optimistic case does produce more rapid growth, i.e., 4.5 percent, but that is based strictly on the three years between 1985-1987 when rate of return awards were much higher than today. The optimistic case, while useful for comparative purposes, is not a realistic expectation.

OCA St. 1 at 28-29 (emphasis added).

In addition to historical earnings performance, Mr. Kahal also examined historical growth rates and investor analyst projections. Id. at 29-30. As Mr. Kahal explained:

> The historical rates of growth for the proxy group, as shown on this schedule, have been relatively slow. Over the last five years, they average to only 1.1 percent for dividends, 2.7 percent for earnings and 2.3 percent for book value. The average for all three measures is 2.0 percent. The ten-year growth rates are similar, averaging about 1.9 percent. The five- and ten-

[81] Mr. Kahal noted that the optimistic case was of limited relevance because it reflects conditions only from the mid-1980s when allowed returns were much higher than currently. OCA St. 1 at 28.

> year historic growth rates are somewhat lower than my earnings retention analysis.

Id. at 30, Sch. MIK-5 at 3. Further, as Mr. Kahal testified, recent growth rate projections published by the Value Line Investment Survey and the IBES survey support Mr. Kahal's growth rate recommendation:

> the IBES and Value Line "normalized" growth rates for the eight companies average to 2.6 and 3.4 percent, respectively. The Value Line 1994-1998 earnings growth rate projections average to 3.1 percent, suggesting that Value Line may be slightly more optimistic than investor analysts generally.

Id. at 31, Sch. MIK-5 at 4-5.

Mr. Kahal's DCF results for the Moul Proxy Group are summarized on page 1 of Schedule MIK-5 (May 1995 Update). As shown on that schedule, Mr. Kahal began with a dividend yield for the group of 7.52 percent adjusted forward to 7.7 percent. The growth range is 3.0 to 3.5 percent. Summing these components produces an estimated total return of 10.7 to 11.2 percent. The midpoint of this range, 11.1 percent, which is Mr. Kahal's recommendation. The OCA submits that this analysis is provides recognition of the

industry and capital market conditions over the past six months.

c. The Primary Proxy Subgroup Study

Mr. Kahal also performed a DCF study using a proxy group of fifteen electric utilities. OCA St. 1 at 32; OCA St. 1A at 2-3. Mr. Kahal explained that all of the Companies in the proxy group are:

> ... in the Value Line data base rated "2" or "3" for Safety (an above average and average rating, respectively) and with Moody's bond ratings of A. PP&L is rated "2" for Safety and A(2) by Moody's. In addition, I have excluded the non-nuclear utilities and any utility experiencing a dividend reduction (or nonpayment) within the past two years.

OCA St. 1 at 32. Mr. Kahal applied the DCF model to the primary proxy group in the same manner as discussed above. In this study, Mr. Kahal followed the same procedures that he used in his DCF analysis of Mr. Moul's proxy group. Mr. Kahal set forth the results of his study at OCA St. 1A, Sch. MIK-6 (Updated May 1995). Mr. Kahal began his calculation with a dividend yield of 7.41% which he adjusted forward to 7.6%. He then added a growth range of 3.0 to 4.0 to the adjusted yield producing an investor return of 10.6% to 11.6.[82] The midpoint of this range is 11.1% which is

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[82] Mr. Kahal explained the higher growth rate for the primary proxy group in his direct testimony:

> The evidence suggests that long-term growth for my primary proxy companies may be slightly higher than for Mr. Moul's proxy group -- perhaps about 25 basis points higher. In my opinion, the evidence continues to support a growth rate range of 3.0 to 3.5 percent. The earnings retention and the Value Line two-stage analyses produce results that are close to the lower end of this range. To

(continued...)

virtually the same midpoint as obtained for Mr. Moul's proxy group. OCA St. 1 at 32-34; OCA St. 1A at 3, Sch. MIK-6 (Updated May 1995). The OCA submits that the results of Mr. Kahal's DCF analysis of the primary proxy subgroup of 11.1% support Mr. Kahal's 11.1% recommendation.

d. The PP&L Stand-Alone Study

As a check, OCA witness Kahal also performed a DCF study directly to PP&L on a stand-alone basis using the same methodology and data sources as in the two proxy group studies. OCA St. 1 at 35. Mr. Kahal explained that he used the stand alone study only as a check because:

> I believe that proxy groups -- if correctly selected -- should produce more reliable, stable estimates than single company DCF studies. In addition, it should be noted that PP&L is in the process of reorganizing in order to facilitate investments in non-utility ventures. While this activity is nominal at present, it could become significant in the future.

Id. The PP&L dividend yield for the six months ending April 1995 is 8.46 percent, a figure somewhat greater than the proxy group average. Mr. Kahal adjusted that figure forward by a half year of growth to 8.5 percent. Mr. Kahal selected a growth rate range for PP&L of 2.5 to 3.0 percent, noting that the growth rate evidence suggests a growth rate estimate for PP&L somewhat lower than the two proxy group averages. OCA St. 1 at 35; OCA St 1A, Sch. MIK-7.

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[82](...continued)
be conservative and to reflect the possibility of higher growth, I am using a range of 3.0 to 4.0 percent.

OCA St. 1 at 35.

As summarized on Schedule MIK-7 (May 1995 Update), adding these elements, results in an estimated PP&L return becomes 11.1 to 11.6 percent. The midpoint is 11.3 percent, which is slightly above the OCA's 11.1 percent recommendation. The OCA submits that Mr. Kahal's DCF analysis of PP&L on a stand-alone basis which resulted in an 11.3% midpoint return estimate should be considered by the Commission only as a check on Mr. Kahal's other studies.

e. Conclusion

In conclusion, OCA submits that the DCF model is the appropriate model to assist this Commission in its determination of a fair return on equity. The model requires a determination of both a dividend yield and a growth rate and responds to changes in the capital markets. OCA witness Kahal's DCF studies are well supported and consistent with Commission precedent. In reaching his recommendation of 11.1%, Mr. Kahal considered both current capital market conditions and PP&L's position in the financial market. The OCA submits that Mr. Kahal's 11.1% rate of return on equity recommendation and resulting overall rate of return recommendation of 9.33% are reasonable, particularly in light of the trend of improving capital costs.

Mr. Kahal tested the reasonableness of his recommendation using the same coverage test presented by Mr. Moul in his direct testimony. OCA St. 1 at 38; PP&L St. 12 at 55-56. Mr. Kahal reported the results as follows:

> I have followed Mr. Moul's procedure and calculated a pre-tax coverage based on my recommended rate of return, obtaining 3.5x. As Mr. Moul shows on page 21 of his testimony, 3.5x

> is completely consistent with a single A bond rating for an "average" business position electric utility, i.e., PP&L's current position according to S&P. Thus, using Mr. Moul's own credit rating standard, my return is adequate and his is excessive. Moreover, my 3.5x pro-forma figure exceeds the historical coverages both for PP&L and his proxy group during 1988-1993. (See his Schedules 1 and 2.)

OCA St. 1 at 38. See Tr. 45. As Mr. Kahal demonstrated, the OCA's rate of return recommendation in this proceeding also accomplish the objective identified by Mr. Moul in his direct testimony.[83] PP&L St. 12 at 56. Accordingly, the OCA submits that Mr. Kahal's 11.1% rate of return on equity recommendation and resulting overall rate of return recommendation of 9.33% recommendation should be adopted by this Commission.

3. Mr. Moul's Criticisms of Mr. Kahal's 11.1% Return On Equity Recommendation Are Without Merit.

a. Introduction

In rebuttal, Mr. Moul responded to the return on equity recommendations presented by witnesses for the OCA, OTS and PPLICA. PP&L St. 12R at 6-26. Mr. Moul argued that these recommendations "jeopardized the Company's standing in the capital markets" and failed to "support PP&L's financial integrity". PP&L St. 6. In particular, Mr. Moul contended that a single method, particularly the DCF method, should not be used to measure the cost of equity. Id. at 12-20. Finally, Mr. Moul criticized the growth rates used by these witnesses, including OCA witness Kahal, in these DCF

[83] Mr. Moul testified: "Maintenance of a strong A bond rating is the appropriate regulatory objective ...." PP&L St. 12 at 56.

calculations. The OCA will address each of these arguments below.

b. Mr. Kahal's 11.1% Return On Equity Recommendation Fully Addresses The Company's Requirements.

In rebuttal, Mr. Moul criticizes Mr. Kahal's 11.1% recommendation as inadequate and "punitive to existing stockholders" PP&L St. 12 at 6-8. In particular, Mr. Moul argued that this recommendation "provided little, if any, earnings cushion above the Company's current dividend". Id. at 7. The OCA submits that this criticism, is not only invalid it assumes that it is the Commission's responsibility to guarantee PP&L's dividend. As Mr. Kahal testified:

> I am concerned that PP&L would even raise this issue because it implies that the PP&L common dividend is a regulatory variable. In effect PP&L is asking this Commission to approve and validate its dividend payout. The dividend is normally viewed as a matter of management prerogative, and it is not this Commission's job to specifically target earnings levels at some percentage above the dividend. If the Commission were to do so, the incentive would be clear -- utilities would raise the dividend with the understanding that higher authorized ROEs would follow.

OCA St. 1A at 9-10. Importantly, as shown in Mr. Moul's testimony, an 11.1 percent ROE does provide a retained earnings cushion above the current dividend. In addition, even using Mr. Moul's pro forma calculation approach, Mr. Kahal's 11.1% return on equity recommendation provides a pre-tax coverage of 3.5x, which is consistent with a single A bond rating. Therefore, the OCA submits that there is no showing that Mr. Kahal's recommendation is inadequate for maintaining PP&L's financial integrity.

c. Mr. Moul's Criticism Of The DCF Method Is Without Merit.

As discussed above, Mr. Moul criticized Mr. Kahal and the other rate of return witnesses for relying on a single method, the DCF method in determining their return on equity recommendations for PP&L. PP&L St. 12R at 12-20. In addition, he argued that the DCF method in general was circular and limited. Finally, he contended that Mr. Kahal's internal growth rate analysis did not "provide a meaningful measure of the DCF growth rate in this proceeding." Id. at 16-19. The OCA will address each of these arguments in turn.

The OCA notes that although Mr. Kahal based his 11.1% return on equity recommendation solely on his DCF analyses, he also performed risk premium and sample CAPM calculations as a check of both his own and Mr. Moul's recommendations.[84] Mr. Kahal testified that he obtained from these analyses "results similar to but slightly different from my DCF results." OCA St. 1A at 15.

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[84] Mr. Kahal relied exclusively on his DCF studies for his return on equity recommendation. He testified that he performed a risk premium analysis only as a check on his primary evidence, stating:

> I continue to believe that it [the DCF] is the superior, more reliable and the more widely used methodology. I have presented this risk premium study merely to respond to Mr. Moul's contention that the risk premium method produces an investor return estimate substantially greater than obtained by the DCF evidence.

OCA St. 1 at 49. Mr. Kahal noted that since he did not regard either his risk premium or CAPM as being as reliable as his DCF study, it would not be proper to average the three methods together. OCA St. 1A at 15.

Mr. Kahal also took issue with Mr. Moul's characterization of the DCF method as circular, stating:

> To demonstrate circularity, Mr. Moul offers an example of a slow growth utility, claiming that the DCF model would perpetuate the slow growth. His example is not correct. The DCF model -- if correctly applied -- estimates what return investors require. Mr. Moul's error is in equating slow growth with a low DCF result. The slow growth would likely be accompanied by a high dividend yield and thus a "typical" DCF return, not a depressed return. Moreover, a company's rate of growth is to a large extent determined by management policy. That is, management can select either a high current dividend payout and thus slow growth or a low current payout which results in more rapid growth due to retained earnings reinvestment. Management selects among this spectrum of financial policies. This has nothing to do with the DCF model (unless management's choice affects risk).

OCA St. 1A at 13. Moreover, as Mr. Kahal noted, if there is any validity to Mr. Moul's "circularity" theory, this would argue very strongly for the use of a proxy group in place of a PP&L stand-alone study.

Finally, the OCA submits that the NARUC survey excerpted in Mr. Moul's testimony [PP&L St. 12R, Exh. PRM -3, Sch. 3] does not support his argument other Commission's rely on other methods, in addition to the DCF. OCA St. 1A at 13 The OCA submits that not only is this survey not binding on the Commission, its reliability is questionable. As Mr. Kahal testified:

> That survey seems to suggest that the DCF model is the principal method relied upon by utility commissions, with other methods also referenced. A limitation of the survey is that it tells us nothing about relative weights given to different methods. For example, after the DCF, the next most cited method is comparable earnings. However, it has been my experience that almost no

> weight is given that method in arriving at a final ROE finding for electric utilities.

OCA St. 1A at 13. Even Mr. Moul acknowledged that in the last five years he did not know of any Commissions that used the Comparable Earnings Method to determine an electric utility's cost of common equity. The OCA submits that, as discussed above, the Commission should continue its long-standing precedent of utilizing the DCF method in determining PP&L's cost of capital.

d. Mr. Kahal's Growth Rate Is Supported By The Evidence Of Record.

PP&L witness Moul criticized the growth rates utilized by the witnesses for the OCA, OTS and PPLICA. PP&L St. 12R at 16-19. In particular, he contended that the retention growth rate utilized by Mr. Kahal does not provide a meaningful measure of growth. Id. at 17.

Mr. Kahal responded to these arguments in his surrebuttal testimony noting that although Mr. Moul argued against reliance on earnings retention growth estimates, he did not explain why he disagrees with this measure of growth, thus Mr. Kahal could not respond to his disagreement. Mr. Kahal testified that:

> [A]s a practical matter, however, this disagreement makes little difference because all other measures of growth which I cite (e.g., Value Line two-stage, IBES projected earnings, etc.) are consistent with my ultimate growth rate findings.

OCA St. 1A at 13.

In response to Mr. Moul's criticism of the Value Line return on equity figures, Mr. Kahal noted that the Value Line projected ROEs are based on a three-year average, not a single-

year. Even if there is a year-end average year discrepancy in those projections, the effect on the DCF growth rate figures would be negligible. OCA St. 1A at 13-14. As discussed above, the OCA submits that Mr. Kahal's 11.1% return on equity recommendation is fully supported and should be adopted by the Commission.

4. Mr. Moul's 13.0% Return On Equity Recommendation Is Overstated.

a. Introduction

As discussed above PP&L witness Moul utilized a DCF, a Risk Premium ("RP"), tho Capital Asset Pricing Models ("CAPM") and a Comparable Earnings analyses to arrive at his 13.0% cost of equity recommendation. PP&L St. 12 at 3. The results of these analyses are summarized below:

	PP&L	Proxy Group
DCF	12.46%	11.85%
Risk Premium	13.25%	13.25%
Traditional CAPM	12.79%	12.72%
Zero Beta CAPM	13.92%	13.88%
Comparable Earnings	13.55%	13.55%
Average	13.15%	12.99%

Source: PP&L St. 12R, Exh. PRM-2, Sch. 1 at 1.

The OCA submits that as set forth in Mr. Kahal's direct and surrebuttal testimony and as discussed below, these analyses are flawed and should not be relied upon by the Commission in determining PP&L's cost of common equity. In particular, Mr. Moul's DCF analyses relied on an unsupported 4.0% growth rate and the result was then adjusted upwards for "non-company specific factors, an ex-dividend adjustment and quarterly compounding of the

dividend. Also, Mr. Moul relies on the comparable earnings method even though it does not address the cost of equity estimation. The other two approaches used by Mr. Moul the CAPM and risk premium, have been repeatedly rejected by this Commission in the past, most recently in Pa. P.U.C. v. Roaring Creek Water Company, Docket No. R-00943177, slip op. (May 31, 1995).

b. Mr. Moul's DCF Results Are Not Supported By The Evidence Of Record.

Although Mr. Moul's DCF analyses produces the lowest return on equity recommendations of any of the four methodologies he relied upon to reach his 13.0% recommendation, the OCA submits that the result is still overstated.[85] PP&L St. 12R, Exh. PRM-2, Sch. 1. In reaching his DCF result, Mr. Moul utilizes an unsupported growth rate in his DCF calculation of 4.0%. Mr. Moul achieves this 4.0% growth rate by adding 0.5% to his growth rate to account for "non-company specific" market factors. Mr. Moul also adjusts his DCF calculation upwards by including an ex dividend adjustment and quarterly compounding of the divided. The OCA submits that these factors render Mr. Moul's DCF results unreliable for use in determining PP&L's cost of common equity.

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[85] The OCA notes that Mr. Moul in his direct testimony, testified that although he typically employed a "twelve month dividend yield", that in this proceeding he used dividend yields "above the twelve month average and near the six and three month average." PP&L St. 12 at 40. See also, Tr. 30-31. In response to cross-examination regarding the updated analyses presented in his rebuttal testimony, Mr. Moul testified that the dividend yields were averaged over twelve months. Tr. 1799.

The largest discrepancy in Mr. Moul's DCF calculation results from his use of a 4.0% growth rate. As OCA witness Kahal testified:

> Mr. Moul adopts a 4.0 percent growth rate both for PP&L and his barometer companies. Although he displays his source data, that information fails to support his 4.0 percent estimate. For example, consider the growth rate data he provides for his barometer group. As shown on his Schedule 9, page 2, historic growth ranges from -2.56 to +3.31 percent, averaging about 1.5 percent. The projections data which he cites on page 2 of his Schedule 10 range from 1.56 to 3.81 percent, averaging 2.7 percent. The "leap" from such evidence to 4.0 percent is neither clearly nor convincingly explained.

OCA St. 1 at 45. See Tr. 35-36. Although Mr. Moul in his rebuttal testimony, criticized the growth rate calculation of the other rate of return witnesses, including Mr. Kahal, he provided no support for his growth rate.

Mr. Moul testified that he reached the 4.0% growth rate by adding 0.5 percent for what he calls non-company specific factors to a 3.5% growth rate based on company specific variables. PP&L St. 12 at 43-44. In his direct testimony, Mr. Moul listed a number of "quantitative and qualitative" factors that he relied upon to develop his 0.5% growth adjustment for market-wide factors. Id. However, Mr. Moul never provided any analyses to support the 0.5% growth addition. As OTS witness Deardorff testified:

> Mr. Moul has not presented any quantitative evidence to support the claim that market factors result in an additional .5 percent growth to the company. Mr. Moul acknowledged on cross-examination that these factors could result in a negative adjustment. Without sufficient quantitative evidence to support a specific number this adjustment should be rejected.

OTS St. 1 at 40. The OCA submits that this adjustment appears to be little more than an unwarranted adder to the DCF results. Moreover, as Mr. Kahal testified:

> The 4 percent is not in any way supported by a review of the objective evidence. For example, at page 17, lines 13-19, he seems to argue for reliance on published earnings per share growth rates. But that information supports growth much lower than 4 percent, at least a percentage point lower. At pages 18-19, he attempts to justify his higher number by suggesting investor analysts are omitting factors that are contributing to growth and are being "overly conservative."

OCA St. 1A at 14. The OCA submits that there is no objective support in the record for the 4.0% growth rate utilized by Mr. Moul in his DCF calculation.

Finally, Mr. Moul increased his DCF result through the use of an ex-dividend adjustment and quarterly compounding of the dividends. The OCA submits that both adjustments should be rejected. OTS witness Deardorff explained the reasons an ex-dividend adjustment is inappropriate in his direct testimony:

> First, Mr. Moul was unable to supply any academic evidence in support of an ex-dividend adjustment to dividend yields in the context of the DCF analysis.
>
> Secondly, Mr. Moul was unable to provide any investor influencing financial publication that provides ex-dividend adjustments dividend yields to investors for their investment decision making purposes.

OTS St. 1 at 39. The OCA submits that the quarterly compounding adjustment suffers from the same flaws.

In rebuttal, Mr. Moul argued that the quarterly compounding adjustment to dividend yields is "an entirely

reasonable refinement to developing adjusted dividend yields". PP&L St. 12R at 16. In addition, he stated that the ex-dividend adjustment was warranted due to the "availability of data through electronic sources and the increased use of personal computers ...". The OCA submits that simply because the use of a computer means that an adjustment could be made does not mean that an adjustment should be made. There is no evidence in this case that these adjustments are required by the DCF theory or are widely accepted in either the financial or regulatory communities.

For the foregoing reasons, the OCA submits that Mr. Moul's recommendation of a 12.46% DCF for PP&L and a 11.85% DCF for the barometer group are overstated and should not be utilized in the determination of PP&L's cost of common equity.

c. Mr. Moul's Risk Premium Analyses Should Be Rejected.

i. Introduction

Under the risk premium approach, the cost of equity equals the interest rate on long-term corporate debt , plus an equity risk premium. PP&L St. 12, Appendix D-2. In this proceeding , the risk premium cost of equity is derived as the sum of the prospective market yield on single A utility bonds -- 8.5 percent as of the time of Mr. Moul's study -- plus an assumed 4.75 percentage point equity premium. The 4.75 figure is based upon Mr. Moul's inspection of historic average returns on utility stocks and bonds over the past 65 years, i.e., since 1928. OCA St. 1 at 46; PP&L St. 12R, Exh. PRM-2, Sch. 1. This Commission has repeatedly rejected the risk premium because of its reliance on historic data,

the OCA submits that the risk premium method utilized by Mr. Moul should also be rejected.

ii. The Commission Has Consistently Rejected The Risk Premium Method And Should Continue To Do So In This Case.

The risk premium method has been presented before this Commission on numerous occasions and has been rejected each time as unsuitable. In 1986, the Commission firmly rejected the approach stating:

> [C]apital markets and the general economic environment of today differ considerably from earlier decades. For that reason, relationships that prevailed between financial assets have also changed. [OCA's witness] testified:
>
> > Investor perceptions and behavior today are heavily influenced by the huge federal deficits, recent experience with high inflation and fluctuating interest rates, deregulation of banking and financial services, Federal Reserve policy innovations, and other events...(citation omitted).
>
> In the same vein, this Commission stated:
>
> > We believe that much of this lengthy period (1926-1984) is ancient history to today's investor, and not relevant in any real sense. (citation omitted).

Pa. P.U.C. v. National Fuel Gas Distribution Corp., 62 Pa PUC 407 (1986) at 441-442; accord, Barasch v. Bell Tele. Co. of Pa., 67 Pa PUC 195; 94 PUR 4th 12 (1988) at 217, 35; accord, Pa. P.U.C. v. Roaring Creek Water Co., 150 PUR4th 449 (1994) at 483-488.

In Pa. P.U.C. v. Pennsylvania Power Co., 67 PaPUC 91; 93 PUR4th 189 (1988) at 164, 266, the Commission further elucidated on its reasons for rejecting risk premium approaches. The Commission stated:

> [F]irst, we cannot accept that historic experienced earnings reflect the cost of capital. We know of no reputable analyst who would seriously argue that experienced earnings represent the cost of capital, except by pure happenstance. But, such is the inherent assumption of each methodology [Risk Premium and CAPM]. Second, we cannot accept, even assuming that historic experienced earnings represented the cost of capital, that the average premium of an equity investment over a period as long as 50 years, represents the investor required premium in today's and tomorrow's market. Accordingly, we conclude that we can place little credence in the results of these methodologies.

See also, Pa. P.U.C. v. Pennsylvania Gas and Water Co., 79 Pa PUC 349, 393 (1993).

The concerns voiced by the Commission in the cases referenced above are equally applicable to this case. Mr. Moul used data from 1928 to 1993 in preparing his risk premium analysis. PP&L Exh. PRM-1, Sch. 12. As Mr. Kahal testified:

> One of the main difficulties is that historical returns can be used to show just about anything, depending on how it is presented. For example, the average annual return on utility stocks going back to 1928 is 8.8 to 11.0 percent using the geometric and arithmetic means, respectively. Yet, Mr. Moul looks at the very same data and concludes that historic market returns support an expected return on utility stocks of about 14 percent. This illustrates the problem.
>
> The source of the difficulty with using historic returns data rests with the historic market returns on utility bonds -- about 5.5 percent. (See Mr. Moul's Schedule 12.) Since inflation over that same historic period averaged more than 3.0 percent, this indicates an inflation adjusted bond return after inflation of 2 to 2.5 percent. Single A bonds today yield about 8.5 percent, providing investors with a spread over inflation of at least 5 percentage points.

OCA St. 1 at 47. As the Commission has noted in its Orders rejecting the Risk Premium approach, investor behavior in the bond market today is vastly different than over the past 67 years. The OCA submits that there has been simply too much change in financial markets in recent years to support Mr. Moul's use of the traditional risk premium measured over the last 67 years.

In addition, Mr. Kahal performed a risk premium study as a check on Mr. Moul's risk premium results. Mr. Kahal described the basis of this study as follows:

> There is another approach which does not require reliance on historical after-the-fact returns data. This involves directly estimating the cost of equity over an historical time period using DCF calculations and subtracting out contemporaneous bond yields. The result is a time series of risk premium figures.

OCA St. 1 at 47-48. The results of the study using recent representative bond yields of about 7.4 percent for the ten-year Treasury rates and 8.5 percent as the single A utility bond yield, are:

Ten-Year Treasury Note:	7.4% + 3.7%	= 11.1 percent
Single A Utility Bond:	8.5% + 2.2%	= 10.7 percent

OCA St. 1 at 49. Mr. Kahal noted that these risk premium-derived cost of equity estimates fall within the range of his DCF proxy group results in this case.

In rebuttal, Mr. Moul testified that "Risk Premium results should be given serious consideration, particularly under current market conditions." PP&L St. 12R at 20. However, by his analysis to an historic period ending in 1993, Mr. Moul's risk premium analysis fails to capture any of the recent changes in the market,

and contains no data relating to "current market conditions". Mr. Moul also testified that Mr. Kahal's Risk Premium study did not provide a valid measure of the cost of equity since it "starts with a DCF-derived equity cost rate." Id. The OCA submits that Mr. Kahal did not rely on his risk premium study to determine his return on equity recommendation in this proceeding, but used it solely as a check of the reasonableness of Mr. Moul's results. Mr. Kahal noted that there were a number of problems with this method:

> Risk premium studies in almost every case are based upon historic market data sometimes going back many decades. In my case, I used FERC data from 1985-1991, which are far more recent than data used in most risk premium studies. Even so, the use of historic data and market data which may not be specific to the utility in question are serious limitations. For example, my study uses the entire electric utility industry and Mr. Moul uses the S&P 40 utilities, many of which are not even electrics.

OCA St. 1A at 15. The OCA submits that the risk premium results derived from Mr. Moul's study do not reflect the current cost of capital. Accordingly, the OCA submits that the that the Commission should continue to reject the risk premium method Commission should not rely on Mr. Moul's Risk Premium results in establishing PP&L's cost of equity.

3. Mr. Moul's Traditional And Zero Beta CAPM Studies Overestimates PP&L's Cost of Equity.

In this proceeding, Mr. Moul presented two Capital Asset Pricing Models ("CAPM") to support his 13.0% return on equity recommendation. As set forth in Appendix E to Mr. Moul's direct testimony:

> The Capital Asset Pricing Model attempts to describe the way prices of individual securities are determined in efficient markets where information is freely available and is reflected instantaneously in security prices. The CAPM states that the expected rate of return on a security is determined by a risk-free rate of return plus a risk premium which is proportional to the non-diversifiable (or systematic) risk of a security.

PP&L St. 12, Appendix E-1. Mr. Moul utilized both "traditional" and "zero beta" CAPM studies.[86]

OCA witness Kahal explained that:

> The traditional CAPM model employed by Mr. Moul requires three major inputs: (1) a beta or "proxy beta" (β) for the subject utility; (2) a measure of the prospective return on a risk-free asset (Rf), and (3) the return on the overall stock market (Rm). ... To apply the model, Mr. Moul uses a Treasury bond rate of 8.0 percent, an electric utility beta of 0.68 and an overall stock market return of 15.85 percent. The 15.85 percent stock market rate of return implies an equity risk premium over the risk-free interest rate of 7.85 percent. ... Using PP&L by itself, his CAPM cost of equity is a slightly higher 13.5 percent.

OCA St. 1 at 49-50. Mr. Moul updated his traditional CAPM results in rebuttal obtaining a 12.72% result for PP&L. PP&L St. 12R, Exh. PRM-2, Sch. 1.

Mr. Moul also utilized a "zero beta" CAPM. Mr. Moul, explained his use of two models as follows:

> Recognizing that the traditional CAPM theory may misspecify the cost of equity, I have utilized a variation of the CAPM theory to account for this potential understatement.

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[86] Mr. Moul explained his use of the two models as follows: [Recognizing that the traditional CAPM theory may misspecify the cost of equity, I have utilized a variation of the CAPM theory to account for this potential understatement. PP&L St. 12, Appendix E-2.

PP&L St. 12, Appendix E-2. In his May 1995 update, the zero beta CAPM produced a 13.92% result for PP&L and a 13.88% result for the barometer group. PP&L St. 12R, Exh. PRM-2, Sch. 1. The OCA submits that these results are overstated and should not be considered in determining PP&L's cost of common equity.

Mr. Kahal detailed his disagreements with Mr. Moul's CAPM results in his direct testimony. OCA St. 1 at 49-53. As Mr. Kahal noted, and Mr. Moul acknowledged, the CAPM has found little acceptability in either the regulatory or financial community. See also, PPLICA St. 8 at 48-55. In particular, Mr. Kahal disagreed with Mr. Moul's risk free interest rate of 8.0% and determination that the overall stock market cost of equity of 16.8%. OCA St. 1 at 50-53. As Mr. Kahal testified:

> A fundamental problem with the CAPM is that it first requires an estimate of the return investors require on the stock market as a whole. Mr. Moul assumes that to be 16 percent, a figure far out of line with both historical experience and published evidence.

OCA St. 1A at 15. The OCA submits that Mr. Moul's CAPM analyses are based on overstated data which is not consistent with investor's expectations.

As discussed above, the Commission has repeatedly rejected both the rejected the Risk Premium and CAPM analyses in the cost of common equity determination. See e.g. Pa. PUC v. York Water Company., 75 Pa. PUC 134, 153-167 (1991). Specifically, in York Water, the Commission recited its rationale for not using various risk premium and CAPM studies for the purpose of determining a public utility's ratemaking cost of common equity. In this

proceeding, even Company witness Moul expressed doubt about the reliability of the CAPM method. PP&L St. 12, Appendix E-2. The OCA submits that the same rationale for rejecting the CAPM proposed in past proceedings, should be applied to reject Mr. Moul's CAPM studies in this proceeding.

e. Mr. Moul's Comparable Earnings Analysis Should Not Be Accepted By This Commission.

The comparable earnings approach was described by Mr. Moul in his direct testimony:

> In order to identify the appropriate return on equity for a utility, it is necessary to analyze returns experienced by other firms within the context of the Comparable Earnings standard. The firms selected for the Comparable Earnings approach should be non-regulated companies so that circularity is avoided. Since utilities must compete with non-regulated firms in the capital markets, it is appropriate, if not necessary, to vie the returns experienced by firms which operate in competitive markets.

PP&L St. 12, Appendix B-1. In response to cross-examination, Mr. Moul acknowledged that the comparable earnings is not a technique designed to estimate the market-determined cost of equity. Tr. 42

Mr. Moul selected twenty three companies for his comparable earnings analysis. PP&L St. 12 at 37. As shown on PP&L Exh. PRM-1, Sch. 7, included in this analyses were seven petroleum companies: Amoco Corp., Chevron Corp., Atlantic Ritchfield, Exxon Corp., Mobil Corp., Murphy Oil Corp. See Tr. 70. Mr. Moul then developed return percentages based on accounting returns on book value for these companies using data from 1989 through 1993 and the Value Line forecasted return. PPLICA St. 8 at 42-42. As shown on PP&L Exh. PRM-1, Sch. 7, the average was 13.55%.

Witnesses for OCA and PPLICA recommended that Mr. Moul's Comparable Earnings Approach be rejected. OCA St. 1 at 53-56; PPLICA St. 8 at 42-45. As OCA witness Kahal testified, the Comparable Earnings result of 13.55% is not a valid estimate of PP&L cost of equity because it is not a market cost of equity estimate. OCA St. 1 at 53. Mr. Kahal testified that the Comparable Earnings approach should be rejected because the cost of equity is a market price (just as an interest rate is a market price), and comparable earnings figures are merely accounting returns:

> ... the accounting returns on book equity fail to measure the return opportunities of investors for one simple reason -- stocks of the comparable companies do not sell at book value. The fact that a company may be consistently earning 20 percent on equity does not by itself make the investment attractive, if that stock is also selling at 300 percent of book value per share.
>
> A further concern relates to the problem of monopoly power. A central purpose of regulation is to prevent utilities with monopoly franchises from exercising monopoly power. One danger of the comparable earnings method is that it may to some extent be including profits which arise from the possession of monopoly or market power. This problem tends to increase whenever lower risk companies are selected as being comparable. If earnings are inflated by monopoly power, they certainly cannot be used as a standard for setting a utility's fair rate of return. Mr. Moul's analysis neither recognizes nor addresses this concern.

OCA St. 1 at 54-55. See also, PPLICA St. 8 at 43-44. The OCA submits that the because the comparable earnings method is not a market-based approach to estimating the cost of common equity it should not be used as a method for establishing the cost of PP&L's

common equity in this proceeding.[87] Importantly, as discussed above, it should not be averaged together with Mr. Moul's other cost of common equity analyses to arrive at a recommendation for PP&L. PP&L St. 12R, Exh. PRM-2, Sch. 1.

F. Conclusion

For all of the foregoing reasons, the OCA submits that PP&L has failed to meet its burden of proof in support of its request for this Commission to allow it the opportunity to earn a return on equity of 13.0 percent. The OCA recommends that this Commission adopt the analyses and conclusions presented herein by the OCA in support of allowing PP&L the opportunity to earn 11.1% return on common equity and a 9.27% overall return on its rate base.

[87] In response to cross-examination, Mr. Moul stated that based on his experience, he could not "name" any electric utility case in the last five years where a state commission relied upon the comparable earnings method for establishing return on equity. Tr. 1803.

X. RATE STRUCTURE

A. Introduction.

As part of its rate increase request in this proceeding, PP&L has presented a proposed revenue allocation to the various customer classes based, in part, on the 12 Coincident Peak (12 CP) cost of service study conducted by the Company. PP&L St. 7 at 5. The Company has proposed increases for its class revenue requirements that range in percentage increases from 0.15% to 17.39%. PP&L Exh. OGK-3. For the Residential class under Rate Schedule RS, the Company has proposed an increase of 15.29% as compared to the system increase of 11.7%. For the Residential Thermal Storage Class (RTS), the Company has proposed an increase of 17.39%. PP&L Exh. OGK-3.

The OCA presented the testimony of Dr. Charles E. Johnson[88] contesting the Company's cost of service methodology, the proposed revenue allocation, the Company's proposed increase in the customer charge for Rate RS and RTS, and the Company's proposed rate design for Rate RS. In addition, Dr. Johnson addressed certain issues that arose during this proceeding regarding the terms and conditions of the RTS rate schedule.

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[88] Dr. Johnson is a principal with Exeter Associates specializing in the area of energy economics and utility regulation. Dr. Johnson holds a combined B.S. Degree in chemistry and Physics from the University of Utah, and M.S. in Mathematics from the University of Wisconsin, and a Ph.D. in Mathematics from the Ohio State University. Dr. Johnson has testified on numerous occasions before regulatory commissions in the area of cost of service studies, rate design, depreciation and financial issues. In addition, Dr. Johnson has developed a series of seminars on cost of service and rate design and has provided training on these issues to Commission Staff in several states.

The OCA recommends three modifications to the Company's class cost of service study. First, the OCA proposes that production and transmission related costs be allocated using the Peak and Average methodology. Second, the OCA proposes that the distribution demand allocators be adjusted to account for the load-carrying capability of the minimum distribution system. Third, the OCA proposes that the value of interruptible credits to other ratepayers in the cost study be the current value of peaking capacity to the system. OCA St. 3 at 4.

In addition, the OCA recommends that the Company's proposed customer charge increase for Rates RS and RTS be rejected. The Company has not established that an increase in the customer charge is justified. Dr. Johnson has also recommended that the Commission reject PP&L's proposal to increase the number of energy blocks for the residential classes from two to three. The Company has presented no valid reason for this increase in energy blocks.

Lastly, the OCA has recommended that the RTS rate schedule be closed prospectively with current customer locations being grandfathered under the existing rate schedule. Additionally, the OCA recommends that the RTS class be given no greater a percentage increase than the RS class, or in the alternative, the 2.3¢/kwh rate differential that currently exists between the two rate schedules be maintained.

B. The OCA's Cost-Of-Service Study Properly Allocates Costs To The Customer Classes And Should Be Adopted In This Proceeding.

1. The OCA's Peak And Average Methodology Should Be Utilized In This Proceeding In Allocating Production Investment.

a. The Company's 12 CP Cost Of Service Study Is Flawed And Should Not Be Utilized For Revenue Allocation Purposes.

The Company has presented a cost-of-service study in this proceeding, sponsored by PP&L witness Kleha. The OCA has proposed three modifications to the Company's cost-of-service study: (1) the use of the Peak and Average methodology for allocating production investment, (2) an adjustment to the demand allocator in the minimum distribution study, and (3) an adjustment in the value of interruptible credit used for cost of service purposes. Each adjustment will be discussed in detail below.

As to the allocation of production investment, the Company has utilized a 12 CP method in its cost of service study. Under the 12 CP methodology, PP&L has relied on the average of 12 monthly coincident peak demands (12 CP) for the allocation. The 12 CP method, however, does not recognize that the cost of generating plant in service is partly determined by the amount of energy that the plant is expected to provide. OCA St. 3 at 5. As such, the energy consumption of the classes has not been incorporated into the allocation of generating plant investment in the PP&L study.

As will be set forth fully below, a method that incorporates both energy and demand in the allocation of production

plant more appropriately reflects the relationship between cost incurrence and cost responsibility.

b. The Peak and Average Methodology Properly Recognizes Both the Demand And Energy Components of Power Production Investment.

A cost of service study is an analysis of the types of costs or investment a utility incurs, the reasons for that cost incurrence, and the allocation of these costs to the classes which use the plant. The OCA submits that classification of the production and transmission investment should be based upon an understanding of the generation planning process in order to understand the reasons for the incurrence of the capacity costs. In particular, it is critical to recognize how the energy requirements affect the Company's capacity planning decisions. OCA witness, Dr. Johnson, explained:

> The energy requirements of the classes make up the total jurisdictional energy requirements of the Company, and the Company's energy requirements affect the production investment decisions of the Company. If it were only necessary to meet the maximum demand (even the 12 monthly maximum demands) for a short duration, PP&L could do so at lowest cost by installing combustion turbine peaking units and would not need to install baseload generating capacity. In order to supply energy the year around and meet the maximum demands, the Company installs a mix of generation facilities--baseload, intermediate and peaking.

OCA St. 3 at 8.

PP&L witness Sipics, PP&L's witness on system planning issues, also recognized the importance of serving the year round energy needs. As Mr. Sipics testified:

> When you look at our base load units, the reason we spend a lot more capital than you would need to

> spend to build a combustion turbine is because we were looking to provide energy over greater periods of time.

Tr. 298.

Dr. Johnson further explained the tradeoffs between the different capacity resources as follows:

> The baseload units have relatively higher fixed costs and relatively lower variable costs so that if they run a large number of hours of the year, the total cost is lower than for the other two types. The peaking units have relatively lower fixed costs and relatively higher variable costs, enabling loads of short duration to be met at the lowest total cost. Intermediate units have both fixed and variable costs between those of baseload and peaking units.

OCA St. 3 at 8.

The OCA submits that the generation planning process must be reflected to the fullest extent possible in the cost of service study in order to make a determination of the reasonable relationship between cost incurrence and cost responsibility. As OCA witness Johnson explained:

> The amount of investment in generating plants is a function of both the amount of capacity the utility has and the mix of its generating capacity. A utility with a high load factor could meet its total production costs at the lowest cost by having more baseload plant than a utility with a low load factor would have. Because the energy requirements of the utility are a factor in determining the amount of production investment, the energy requirements of the rate classes should be a consideration in allocating the production investment to the classes. PP&L has not done so in its study, which results in overstating the costs of the lower load factor classes, such as residential and small commercial customers.

OCA St. 3 at 9. See also, CEPFOD St. 1 at 26.

The OCA submits that the Peak and Average methodology provides explicit consideration of both the amount of capacity required to meet system coincident peak requirements and the energy requirements of the class. In this case, Dr. Johnson determined the percentage of investment to be allocated on the peak demand versus the amount to be allocated on class energy based on the system load factor. OCA St. 3 at 9. The system load factor is the average demand for the year divided by the peak demand of the year. Based on the system load factor, Dr. Johnson recommended that 61.05% of the production investment be allocated on the basis of class energy and 38.95% of the production investment be allocated on the basis of class demands. Id.

To measure class peak demands for the purposes of his cost of service study in this proceeding, Dr. Johnson utilized the average of three winter and two summer peak demands. OCA St. 3 at 9. The use of both winter and summer peaks is appropriate for PP&L since the peaks in both periods will have a cost impact on PP&L. Since PP&L is a winter peaking utility, and its winter peak demand has a more significant impact on its peak-related costs, it is appropriate to use the winter peaks in the measurement of class peak demands. Dr. Johnson utilized the months of January, February and December since over the most recent five year period, the winter peak occurred in one of these months. OCA St. 3 at 12.

Dr. Johnson also included two months when, historically, PP&L has experienced its summer peak load. Dr. Johnson explained the need to include the summer months as follows:

> As for the summer months, increases in the PP&L summer peak load would result in added costs to the PP&L ratepayers. Mr. Sipics testified that an increase in the summer demand would increase the obligation to PJM [Tr. 274]. It would also reduce the amount of capacity PP&L has to sell to the summer-peaking PJM pool. Thus, summer peak demand has a cost impact on PP&L and, consequently, is important in assigning costs to rate classes.

OCA St. 3 at 12.

Based on these data, Dr. Johnson then combined the peak and average demands to calculate a peak and average vector which was utilized in his cost-of-service study. OCA St. 3 at 13. The results of this study are shown on OCA St. 3, Exh. CEJ-1, Sch. 1. The individual effect of this adjustment is shown in OCA St. 3B, Exh. CEJ-4, Sch. 3. The OCA submits that Dr. Johnson's peak and average methodology be adopted for use by the Commission in this proceeding.

c. Classification of Production Investment on An Energy/Demand Basis Has Been Adopted By This Commission And A Number Of State Utility Commissions.

The need to properly classify utility investment in power production plant between demand and energy (or average loads) has been recognized by this Commission, and by other state commissions. As early as 1981, in a West Penn Power case, the Commission recognized the importance of energy costs in classifying and allocating power production investment. In Pennsylvania Public Utility Commission v. West Penn Power Company, 54 Pa. PUC 602 (1981), the Commission stated as follows:

> We agree with the Consumer Advocate that West Penn must construct generation and transmission plant which provide energy on a fairly constant basis

throughout each day and that types and sizes of transmission facilities are also determined by the amount of megawatt hours. We are persuaded that Consumer Advocate [witness] Miller was correct in his conclusion that:

> [T]he excess of installed cost of base-load generating unit over the cost of the same quantity of peaking capacity is thus a substitute for higher fuel costs that would have to be incurred if all the installed capacity were peaking units and they had to be run throughout the day, week and year to supply base loads. Since the additional capacity costs of base-load generating units is thus incurred to serve base loads, it is appropriate that this cost be allocated on the basis of average demands rather than some measure of responsibility for system peak demands. This corresponds to the energy basis on which fuel costs are allocated.

The single peak demand allocation method used by West Penn fails to recognize that bulk power supply costs are caused by peak demand requirements as well as by average demands. West Penn's method benefits large customers at the expense of the smaller user because large users are not paying their share of the additional cost of generating units which are constructed to provide lower cost base-load generation.

Id. at 634.

The Commission also recognized the value of the peak and average methodology in Pennsylvania Public Utility Commission v. Philadelphia Electric Company, 61 Pa. PUC 589 (1986). In PECO, the Commission stated:

> Keeping in mind the limited purpose for which we use cost of service study results, we will not approve any particular methodology in this proceeding. It appears, however, that the technique espoused by the OCA, which is known as the Peak and Average Demand Method, may best reflect the way PECO's system is planned and the manner in which production and transmission costs are incurred. The OCA describes the significant features of its method as follows:

> This method properly reflects the reasons utilities invest in power production and transmission plant. The Peak and Average accomplishes this allocation by weighting both peak demand usage and annual energy. It is appropriate to apply such a weighting to power production investment costs because, in fact, the utilities must consider both aspects in doing generation planning.
>
> (OCA Exceptions, page 61)
>
> We find it appropriate to direct PECO, for the purpose of its next general rate increase filing, to develop its cost of service study based upon the Peak and Average Demand Method, and to use the results of that study to test the reasonableness of its proposed revenue allocation.

Id. at 678.

More recently, in a 1990 West Penn case, the Commission adopted the use of the peak and average methodology for cost of service purposes. Pennsylvania Public Utility Commission v. West Penn Power Company, 73 Pa. PUC 454, 518 (1990). In adopting the use of the peak and average method, the Commission stated:

> We further agree with the ALJ that while each of the cost of service studies presented in this case may have some merit, the P&A [Peak and Average] study proposed by the OCA appears to be the most reasonable. We agree also with the ALJ's discussion in support of his recommendation to use the P&A method, particularly with his notation that the allocation of costs should reflect the Company's generating planning decisions with regard to base load capacity versus peaking capacity.

West Penn Power, 73 Pa. PUC at 518.

In accepting the ALJ's reasoning, the Commission quoted from the Recommended Decision as follows:

> I agree with the OCA that the allocation of costs should reflect the Company's generation planning decisions with regard to base load capacity versus

> peaking capacity. This is done by including an energy allocation as well as a peak demand allocation in order to recognize the contribution of energy-intensive customers to the Company's capacity planning decisions. The P&A study accomplishes this task, while the single VP study fails to do so.
>
> * * *
>
> Moreover, I disagree with WPP and the other parties in this case who contend that OCA's use of the P&A method shows a lack of understanding of the Company's generating planning process. Obviously, there are many factors which may influence the decisions made by WPP in its generation planning process, some which may not be easily reflected in a cost of service study. However, I believe the P&A study does recognize one of the most important capacity planning factors with respect to cost causation, which the CP study does not.

Id. at 516-517.[89]

Other state Commissions have utilized the peak and average methodology for a number of years. For example, the North Carolina Utilities Commission has utilized the peak and average method since 1981. See Re Carolina Power & Light Co., 41 PUR4th 315 (1981) and Re Carolina Power & Light Co., 55 PUR4th 582 (1983). Additionally, the Massachusetts Department of Public Utilities has approved the use of a peak and average approach. Re Boston Edison Co., 53 PUR4th 349 (1983).

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[89] In a subsequent case in 1992, the Commission did not adopt the OCA's peak and average study due to errors contained in that study which made its results subject to controversy. The Commission, however, did not reject the underlying analysis of the peak and average methodology. Pennsylvania Public utility Commission v. West Penn Power, 79 Pa. PUC 122, 210 (1993)(West Penn 1992).

As the above cases demonstrate, the use of a peak and average approach is an accepted methodology for reflecting the considerations which go into system planning and expansion. The OCA submits that it is an approach which is also appropriate for the present proceeding.

d. The Other Parties Criticisms Of The Peak And Average Methodology Are Unfounded.

Several parties, in their rebuttal testimony, have criticized the peak and average methodology. As Dr. Johnson thoroughly explained in his surrebuttal testimony, these criticisms of the peak and average methodology are erroneous. OCA St. 3B at 6-15.

One criticism of the peak and average method advanced in this case is the claim that fixed costs are demand-related, and should be allocated purely as demand, and variable costs are energy-related. PP&L St. 7-R at 9; OSBA St. R1 at 3. This argument, however, is based on two incorrect notions. First, it assumes that the total cost of investment in capacity is determined by peak demand. As OCA witness Johnson has demonstrated, however, the peak demand only determines the amount of capacity installed, not the mix or type of capacity, and therefore not the amount of investment in generating capacity. OCA St. 3B at 6. The second incorrect notion is that fixed costs should never be recovered through usage since those costs are items such as depreciation or property taxes that are not tied to generation. Id. This argument ignores the fact, however, that peak demands on a utility are also varying and subject to fluctuation. Dr. Johnson explained:

> It should be noted that the two examples mentioned by Mr. Kleha, depreciation and property taxes, do not change if the utility experiences an extraordinarily cold winter and has peak demands greatly exceeding expectations or if the region falls into an economic downturn and industrial customer loads are reduced.

OCA St. 3B at 7. Thus, the fact that these costs are fixed, does not mean that the costs cannot be recovered through usage.

The second argument made by the parties is that if generating capacity investment is partially energy-related, then fuel is partially demand-related, and that some portion of fuel must be allocated on demand to be consistent with the peak and average method. See, e.g., PP&L St. 7-R at 10; OSBA St. R1 at 4-5; and Beth Steel St. 1R at 5-6. This is sometimes referred to as the fuel symmetry argument. The OCA submits that this argument is without merit.

It is important to recognize that the peak and average method looks at all elements of the economic tradeoffs that are utilized by the utility in determining an appropriate mix of generation. Dr. Johnson explained:

> If an ideal utility has to meet load during other than the peak hour, it would be able to do so at lower cost by constructing a mix of generating types; baseload coal and other types of generation, depending on that other load. The existence of this other load does not change the cost of meeting peak demand. It only changes the cost of meeting that additional load by reducing it from the higher fuel cost of the combustion turbine. If a utility has a relatively high load factor, it can meet its customers' requirements at lowest total cost by construction of substantial amounts of baseload capacity, because the fuel costs are lower than if the utility used only peaking units. It should be noted that the total costs of fuel and capital cost for the baseload

> unit (less the capital cost of the combustion turbine) are less that the fuel costs of a combustion turbine.

OCA St. 3B at 8. Thus, under the peak and average method, these types of cost trade-offs are captured, and need not be separately recognized as argued by these parties.

Moreover, as Dr. Johnson pointed out, even if this argument was correct, and some portion of the higher fuel cost of a combustion turbine were considered demand related, the total amount of fuel for combustion turbines for the test year is only $2 million out of a total fuel cost of $450 million. OCA St. 3B at 11. Allocation of the entire $2 million on demand affects the residential class by less than $60,000 in expenses. Id. Even if this argument were correct, the effect is insignificant.

Witnesses Baron, Kleha and Knecht have also argued that the peak and average method sends improper price signals to customers. PPLICA St. 7 at 8; PP&L St. 7-R at 9-10; and OSBA St. R1 at 6. However, this argument confuses cost allocation issues with rate design issues. This is particularly true of PP&L witness Kleha's concern about "sudden and substantial increases in cost responsibility." These types of issues can be addressed through such things as limiting the impact of revenue increases, but it should have no effect on assigning cost responsibility. OCA St. 3B at 12.

Another argument forwarded by the parties is that the peak and average method oversimplifies the generation planning process. PPLICA St. 7 at 4 and Beth Steel St. 1R at 3-4. No one disputes

that the generation planning process is complex, and all cost allocation methodologies must make simplifying assumptions. Indeed, the single peak method, often preferred by Mr. Baron and Mr. Brubaker, uses much simpler assumptions than the peak and average. OCA St. 3B at 13. Moreover, as noted above, this argument was rejected in the Commission's 1990 West Penn decision on this issue. West Penn 1990, 73 Pa. PUC at 516-517.

The OCA submits that the criticisms of the parties, which are discussed in detail in OCA St. 3B at 6-15, are unfounded. These criticisms do not form a basis for rejecting the use of the peak and average method in this case. In fact, the peak and average method is the only cost of service study presented in this proceeding that recognizes the contribution of both peak demands and average demands in the Company's generation planning decisions.

2. OCA Witness Johnson's Adjustment To The Company's Minimum Distribution System Study Should Be Adopted.

a. Dr. Johnson's Recommendation Appropriately Adjusts For The Load Carrying Capability Of the Minimum System.

The Company has utilized a minimum sized distribution system to separate costs into a customer component and a demand component. As OCA witness Johnson explained, this method overstates the amount of costs that are considered to be customer related, and should generally not be accepted for this reason. OCA St. 3 at 14. However, as Dr. Johnson noted, there is an adjustment that can be made to reduce the overstatement. Dr. Johnson has made this adjustment to the Company's study and reflected it in his

cost of service study. OCA St. 3 at 14. The OCA submits that Dr. Johnson's development of an alternative distribution demand allocator, which corrects the overstatement of customer related costs, should be adopted.

Company witness Kleha has used the minimum size method. OCA St. 3 at 14. Dr. Johnson explained this approach as follows:

> Under this approach, the investment in each account is separated into a customer component by calculating the cost of a distribution system consisting of the smallest and least cost components currently being installed by PP&L. For example, the smallest size overhead transformer currently being installed by PP&L is a 10 kVa transformer with a total installed cost of $24,672,274 for the 76,734 transformers of this size, or $321.53 for each transformer. For the total of 338,575 overhead transformers of all sizes, this would require $108,862,020 just for 10 kVa transformers. A similar calculation for the 25 kVa underground transformers produces a total of $45,296,827, or $154,158,847 for the two types. This amount is considered by PP&L to be customer related and the balance of the account, $273,073,741, is considered to be demand related.

OCA St. 3 at 14.

The Company performs a similar analysis for each account, along with the total investment for each account that would be required to construct a distribution system that contained as many poles, transformers and miles of conductors as the existing PP&L distribution system, but composed of the minimum sized components. OCA St. 3 at 14-15. In utilizing the minimum sized distribution method, Dr. Johnson cautioned:

> We must bear in mind that the minimum sized system is a theoretical construct only and would never actually be built. It does not meet the engineering requirements for carrying load that

> are typically necessary for actual distribution systems that are constructed.

OCA St. 3 at 15.

The problem with the minimum sized system method is that the components that are being installed today can carry some load. Although some of the components are not tied directly to load, such as the use of 40 foot poles, the transformers and conductors used in the minimum system can reasonably be expected to carry load. For example, the 10 kVa overhead transformer can easily carry 10 kW of demand. OCA St. 3 at 15. In addition, most utilities install transformers of a size that allows for considerable growth, and transformers can accommodate loads larger than their nameplate rating. Id.

Since these components have a load-carrying capability, they are not fully customer-related. The residual component is often considered to be demand-related. OCA St. 3 at 16. Dr. Johnson explained the resulting problem as follows:

> The objection to the method is that the minimum system (which is characterized by its advocates as being entirely customer related) includes an implicit allocation of demand-related costs that is allocated based on customer count rather than on demand of the customers. This overstates the costs of providing service to the classes of customers that have low demands per customer.

OCA St. 3 at 16.

As Dr. Johnson explained, there are two possible methods of correcting for this double counting. One method, referred to as the zero intercept method attempts to completely isolate the customer-related component. OCA St. 3 at 16. This method,

however, has several problems. An alternative method, which Dr. Johnson recommends in this proceeding, is to attempt to adjust the demand allocator to account for the load carrying capability. Dr. Johnson explained:

> An alternative to attempting to isolate a customer-related portion is to adjust the demand allocator that is used to allocate the demand-related portion so that the load-carrying capability of the minimum system is not ignored. Whatever load the minimum system could carry should be reduced from the allocator for the demand component to recognize that load-carrying capability.

OCA St. 3 at 16.

The adjustment proposed by Dr. Johnson focuses on the transformer investment since the constraining factor of the load carrying capability is the amount of transformer capacity. Dr. Johnson explained the adjustment as follows:

> Each class' allocation of transformer investment can be translated into a number of transformers and, thereby, into total transformer capacity. This amount of demand can then be deducted from the demand allocator. The remaining loads are class loads that cannot be carried by the minimum system and for which additional distribution investment was incurred.

OCA St. 3 at 17. Dr. Johnson had performed these calculations and developed an alternative distribution demand allocator which accounts for the load carrying capability of the minimum system. This adjustment has been incorporated into Dr. Johnson's analysis and is reflected in the results of his cost of service study as shown on OCA St. 3, Exh. CEJ-1, Sch. 1. The effect of this adjustment on an individual basis is shown in OCA St. 3B, Exh. CEJ-4, Sch. 3.

b. PP&L's and OSBA's Criticisms Of Dr. Johnson's Minimum System Method Are Without Merit.

i. Introduction.

PP&L witness Kleha and OSBA witness Knecht have criticized Dr. Johnson's adjustment. PP&L witness Kleha argues that the allocator for the demand portion of the distribution system should not be adjusted to account for load carrying capability of the minimum system. PP&L St. 7-R at 23. OSBA witness Knecht objects to the results of the adjustment. The OCA submits that the criticisms of these witnesses are without merit.

ii. PP&L Witness Kleha's Criticisms Are Unfounded.

PP&L witness Kleha has provided four reasons why he believes that the allocator for the demand portion should not be adjusted. PP&L St. 7-R t 23-24. First, PP&L witness Kleha argues that the minimum size distribution system must have some load carrying capability, thus that is no reason to reject the minimum system approach. As Dr. Johnson explained, however, it is precisely because the minimum system has load carrying capability that an adjustment is in order. Dr. Johnson testified:

> [I]t is because the minimum size distribution system has load-carrying capability that it is not totally customer related, but is partially demand related. In fact, as I have shown, the minimum system posited by Mr. Kleha can carry a substantial amount of distribution load. Because the investment in the minimum size distribution system is allocated on number of customers, the amount of capacity costs being allocated to the classes is not related to the class demands, but rather to the number of customers in the class. It is only appropriate to reflect the load-carrying capacity of the minimum size components by adjusting the demands in the allocator used for

allocating the remaining (demand-related) portion of the distribution system.

OCA St. 3B at 2-3.

Mr. Kleha's second criticism is that the demand allocators are derived from class loads and are "unaffected" by the minimum size distribution system study. PP&L St. 7-R at 23. Essentially, Mr. Kleha is arguing that the demand allocator, since it is derived from class loads, should not be modified. However, as Dr. Johnson pointed out, Mr. Kleha has modified and adjusted numerous allocators throughout his cost study for a variety of reasons. OCA St. 3B at 3. Dr. Johnson's justification for adjusting the distribution demand allocator are fully supported in his testimony. See, OCA St. 3 at 13-17.

Third, Mr. Kleha argues that Dr. Johnson should not have adjusted the Company's cost study, but rather should have developed a completely different method of allocating distribution costs. PP&L St. 7-R at 23. Mr. Kleha argues that to adjust the study is arbitrary. The OCA submits, however, that Dr. Johnson's reasons for adjusting the Company's study are fully supported in his direct testimony. As Dr. Johnson explained, the Company's study, although flawed, is a common method utilized by utilities, and it can be corrected through the adjustment proposed by Dr. Johnson. OCA St. 3 at 13-14. In addition, as Dr. Johnson noted, alternative methods, such as the zero intercept method, also contain problems that require adjustment. OCA St. 3 at 16.

Finally, Mr. Kleha argues that the primary-voltage system "undoubtedly" has a customer-related component that could offset

his overstatement of customer-related costs of the secondary-voltage system. PP&L St. 7-R at 23-24. Mr. Kleha, however, did not provide any quantification of this effect. Dr. Johnson, however, properly quantified the overstatement of customer-related costs in his class cost-of-service study which incorporated his modification. OCA St. 3B at 3. The OCA submits that Dr. Johnson's properly supported and quantified adjustment should be adopted.

For the reasons set forth above, the OCA submits that PP&L's criticisms of Dr. Johnson's minimum system adjustment are without merit. Dr. Johnson's adjustment properly recognizes the flaw in the minimum system method used by the Company, and properly corrects the double counting that results from this flaw. As such, Dr. Johnson's properly supported and quantified adjustment should be adopted.

iii. OSBA Witness Knecht's Criticisms Are Without Merit And Should Be Disregarded.

OSBA witness Knecht has also criticized the results of Dr. Johnson's minimum system adjustment. OSBA St. R1 at 13-16. In addition, Mr. Knecht discusses two areas that he characterizes as methodological errors in Dr. Johnson's adjustment. Id. The OCA submits that Mr. Knecht's criticisms are misplaced.

Mr. Knecht's first criticism is that Dr. Johnson's adjustment ignores the fact that capacity must be built into the system to allow for demand growth, unexpected fluctuation in demand, and other such demand related items. OSBA St. R1 at 15-16. This criticism, however, misses the point of the minimum size methodology. As Dr. Johnson explained, the minimum size

distribution method is intended by its adherents to account for providing a per customer cost of access to the electric system, not a demand cost. OCA St. 3B at 4. It is precisely the demand that Dr. Johnson sought to remove from the customer component by his adjustment. Id. Thus, the demand considerations identified by Mr. Knecht are irrelevant to the adjustment.

The second argument made by Mr. Knecht is that Dr. Johnson did not adjust for the demand effect that is built into the CW8 allocator. OSBA St. R1 at 16. The CW8 allocator is the weighted customer allocator used by PP&L in its cost study to allocate the customer-related portion of line transformers. OCA St. 3B at 5. Dr. Johnson explained that there is no explicit use of demand in PP&L's development of the CW8 allocator. Dr. Johnson further described the development of the CW8 allocator as follows:

> In developing the CW8 allocator, the Company has combined the weighted number of customers served at two phase and three phase with actual numbers of single phase customers.

OCA St. 3B at 5.

The OCA submits that Mr. Knecht's criticism is off the mark. As noted above, there is no explicit use of demand in the development of this allocator by the Company. Moreover, even assuming that the elimination of the weights utilized in the development of the allocator would be necessary to adjust for a demand effect, the impact of this adjustment would be minimal. Dr. Johnson testified:

> While not conceding that the total elimination of the weightings is proper, such a change on the residential service class (the most affected by

> the change) would only be to increase the amount of net transformer investment by about $1.2 million. With a total rate base of about $2,053 million, this would change rate base for the RS class by about 0.06 percent. The return and taxes on this additional rate base would be around $200,000, out of a total revenue of nearly $1,000,000,000 for the residential class. Any adjustment for the demand effect that might be built into the CW8 allocator would have a smaller effect than this.

OCA St. 3B at 6.

The OCA submits that Mr. Knecht's criticisms of Dr. Johnson's adjustment are misplaced and should be disregarded. Dr. Johnson's adjustment properly accounts for the problems with the minimum system method and should be adopted.

c. Conclusion

For the reasons set forth above, the OCA submits that the Company's minimum system method is flawed and should be adjusted in this proceeding. OCA witness Johnson has proposed an adjustment to correct for these errors that is reasonable, properly justified, and properly quantified. Dr. Johnson has incorporated his proposed adjustment in his cost of service study, the results of which are shown on OCA St. 3, Exh. CEJ-1, Sch. 1. In addition, Dr. Johnson has reflected the individual effect of this adjustment on OCA St. 3B, Exh. CEJ-4, Sch. 3.

3. Interruptible Issues For Cost Of Service Study Purposes.

a. Value Of Interruptible Load For Cost Of Service Purposes.

OCA witness Johnson has proposed a third adjustment to PP&L's cost of service study concerning the value of interruptible

service to be utilized for cost of service study purposes. For cost of service study purposes, PP&L has proposed a rate base offset utilizing the cost of a combustion turbine peaking unit as the value of the interruptible load. PP&L St. 7 at 8-10. As OCA witness Johnson explained, however, although the current value of interruptible load may be equal to the current value of a combustion turbine peaking unit, it is not equal to the cost of constructing a combustion turbine. OCA St. 3 at 17.

At this time, the value of peaking capacity is relatively cheap. Dr. Johnson explained current circumstances as follows:

> Peaking capacity is relatively cheap presently and has a value far lower than the current cost of constructing a new peaking unit. The PJM capacity deficiency rate is $73 per kW-year, but it has been traded for 15-20 percent of that value according to Company witness Sipics at page 15 of Statement 9. If a utility in PJM were short of capacity, rather than construct a combustion turbine for $300 per kW or pay the PJM Capacity Deficiency Charge of $73 per kW-year, it could contract with another utility to meet the requirements for as little as $10.95 to $14.60 per kW-year for the capacity.

OCA St. 3 at 17-18.

As a result of these circumstances, the value or benefit of the interruptible load to other customers for each kW that is reduced when a curtailment is called equals the amount that the utility could contract for the peaking capacity. OCA St. 3 at 18. Thus, in determining cost of service, it is that value which should be utilized in the study.

Dr. Johnson has incorporated this adjustment into his cost of service study, the results of which are shown in OCA St. 3, Exh.

CEJ-1, Sch. 1. The individual effect of this adjustment is shown on OCA St. 3B, Exh. CEJ-4, Sch. 3.

b. Interruptible Customers Should Be Assigned A Portion Of The Capacity Costs of Production Investment.

Both PPLICA witness Baron and Bethlehem Steel witness Brubaker have recommended a different method of treating production investment for interruptible customers than the method proposed by the Company for cost of service study purposes. PPLICA witness Baron uses an embedded cost of service approach, rather than the value of interruptible load approach. Under Mr. Baron's approach, he arbitrarily decides that a maximum 50% of the cost of production demand is a reasonable basis for the cost of serving interruptible customers. PPLICA St. 7 at 70-72. Mr. Brubaker argues that interruptible customers should be allocated no portion of the production investment. Beth Steel St. 1 at 9-13.

The OCA submits that interruptible customers should be assigned a portion of the production investment. Interruptible customers make use of the Company's production facilities many hours of the year. As OCA witness Johnson explained:

> Interruptible customers make use of production facilities most hours of the year (PP&L's interruptible rider provides that interruptible customers will be interrupted no more than 200 hours per year.) The other 8,560 hours of the typical year, interruptible customers make relatively intensive use of PP&L's production plant.

OCA St. 3A at 5.

PPLICA witness Baron recognizes that "some measure of fixed production demand costs may be assignable to these interruptible

customers." PPLICA St. 7 at 70. Mr. Baron, however, arbitrarily decides that a maximum of 50% of the cost of production demand is a reasonable basis for serving the interruptible customers. OCA St. 3A at 3. Mr. Baron, although asserting that interruptible rates should be based purely on cost of service, provides no basis or support for establishing the cost of serving these customers. Id.

The OCA submits that both PPLICA witness Baron and Bethlehem Steel witness Brubaker's arguments regarding the treatment of production investment for interruptible customers is flawed and should be rejected in this proceeding. The OCA submits that the approach developed by the Company of calculating a rate base offset for the interruptible credit is appropriate for this proceeding, and properly reflects the value of the interruptible load to PP&L's other customers.

4. Conclusion

For the reasons set forth above, the OCA submits that its cost-of-service study, which incorporates the Peak and Average methodology, the adjustment to account for the load carrying capability of the minimum system, and the adjustment to recognize the value of interruptible load, should be utilized as a guide for allocating any revenue increase, or revenue decrease, in this proceeding.

In addition, the OCA submits that the D10 allocator from the OCA's cost of service study should be used to allocate the capacity related costs which are demand allocated in the Company's

ECR. The OCA's proposed demand allocator for ECR QF payment is shown on Exh. CEJ-1, Sch. 4.

C. The OCA's Cost of Service Study Results In Certain Changes To Class Relative Rates of Return.

Use of Dr. Johnson's peak and average methodology, and the use of the additional adjustments discussed above in the cost of service study, results in the following changes in the relative class rates of returns for the major classes at PP&L's present rates:

COMPARISON OF RATES OF RETURN

Rate Class	PP&L Study	OCA Study	P&A Adj.	Minimum System Adj.	Interrupt. Credit Adj.
RS	5.84	7.31	5.90	7.13	5.91
RTS	-2.36	-2.49	-1.13	-3.34	-2.39
GS-1	14.41	16.60	14.44	16.34	14.59
GS-3	9.93	8.67	11.40	7.44	10.10
LP-4	8.96	7.87	7.86	8.95	8.96
LP-5	5.34	3.09	3.32	5.34	4.92
LPEP	8.09	8.66	8.49	8.13	8.29
ISA	0.79	-1.69	-2.19	0.80	0.58
PA Juris-diction	7.31	7.31	7.31	7.31	7.31

Source: OCA St. 3B, Exh. CEJ-4, Sch. 3.

As can be seen, the OCA's proposed cost of service study makes adjustments to all classes' relative rates of return. As can be seen from the Table, under Dr. Johnson's proposed study, the rate of return for the residential class is almost equal to the overall system rate of return at current rates. Dr. Johnson further described the results of his study as follows:

> The study shows that two rate classes have negative rates of return, specifically Residential Service-Thermal Storage (RTS) and Interruptible

> Service by Agreement (ISA). The rates of return for Large General Service-69 kV or higher (LP-5), Space Heating (GH) and Lighting class (SL/AL) are all below average. the rates of return for Small General Service (GS-1) and Standby are substantially higher than for any other class and the rates of return for Large General Service (GS-3), Large General Service-12 kV or higher (LP-4) and Power Service to Electric Propulsion (LPEP) are slightly above average.

OCA St. 3 at 19.

The OCA submits that these returns are more indicative of costs imposed on the system by each rate class and should be accepted for cost of service and revenue allocation purposes in this case.

D. The OCA's Proposed Revenue Allocation Is Reasonable And Should Be Adopted In This Proceeding.

1. Introduction

The Company has proposed increases in each class designed, in part, to move each class closer to the system average rate of return that was proposed by the Company. PP&L St. 8 at 5. These increases range in percent from 0.15% to 17.39%. The OCA generally agrees with the Company's attempt to move each class closer to system average rate of return. However, under the OCA's proposed study, the relative class rates of return at present rates are different than those developed by the Company, and should be recognized for revenue allocation purposes.

The OCA's proposed revenue allocation uses as its starting point the OCA's proposed cost of service study. However, as Dr. Johnson noted, in addition to the cost of service, he has considered rate continuity, customer impacts, and gradualism. OCA

St. 3 at 21. Specifically, Dr. Johnson restricted the increase to any one class to 1.33 times the overall increase. Id.

In addition, Dr. Johnson has considered the circumstances surrounding the RTS rate as set forth in this proceeding in reaching his recommendation. Dr. Johnson's concerns regarding the appropriateness of utilizing the cost of service study results for determining a revenue allocation for RTS customers are set forth in Section E., which addresses specific RTS issues.

The OCA's proposed revenue allocation is presented in detail on Exhibit CEJ-1, Schedule 2. The OCA's proposed revenue allocation is based upon the Company's proposed revenue increase and summarized on the following Table for the major rate classes:

OCA'S PROPOSED ADJUSTMENT TO
THE DISTRIBUTION OF REVENUE BY CLASS[90]

Rate Class	PP&L Proposed Inc.	PP&L % Inc.	OCA Proposed Adj.	OCA Proposed Inc.	OCA % Inc.
RS	135,568,845	15.29	(31,797,485)	103,771,360	11.7
RTS	3,438,666	17.39	(1,124,640)	2,314,026	11.7
GS-1	6,260,887	3.87	3,323,582	9,584,469	5.93
GS-3	34,096,022	6.73	21,672,361	55,768,383	11.0
LP-4	27,783,995	10.16	3,924,972	31,708,967	11.6
LP-5	40,109,429	15.45	297,425	40,406,854	15.56
LPEP	462,706	5.51	461,828	924,534	11
ISA	31,640	0.15	3,151,028	3,182,668	15.56

Source: PP&L Exh. OGK-2, Tabulation of Revenue Effects, p. 4 of 4 and OCA St. 3, Exh CEJ-1, Sch. 2.

[90]This table is presented at the Company's requested revenue increase level for ease of comparison. The OCA does not agree that the Company should be awarded its full requested rate increase.

As can be seen on Exh. CEJ-1, Sch. 2, p. 4 of 4, the OCA's proposed revenue allocation under the Company's full rate increase request shows percentage increases ranging from 5.93% to 15.56%. The OCA has proposed an 11.7% increase for Rates RS and RTS--equal to the system average increase. The OCA submits that an increase no greater than the system average increase is justified under the OCA's proposed cost of service study for Rate RS since its relative rate of return under that study is almost equal to the overall system average rate of return. The OCA's proposal for Rate RTS is discussed fully in Section E. In addition, as can be seen from the Table, the OCA has recommended a revenue allocation of 15.56% to the ISA class, which had a negative rate of return, as opposed to the Company's allocation of 0.15%. PPLICA witness Baron also recommended a 15.98% increase for the ISA class.

To the extent that the Commission orders a different revenue level that is an increase in rates, the OCA proposes that the increase be spread in proportion to the increase in total revenues as its previous recommendation. OCA St. 3 at 21. The percentages for this increase are shown on Exh. CEJ-1, Sch.3.

If the Commission orders a reduction in revenue, the OCA submits that the first priority would be to reduce revenues from the classes with the highest current rates of return. Dr. Johnson explained the OCA's proposal:

> The GS-1 class should receive the largest decrease, followed by the GS-3, LP-4 and LPEP rate schedules. The rate reductions of the RS and RTS rate schedule should be equal to the overall reduction. Smaller than average rate reductions should be provided to the other classes.

OCA St. 3 at 21.

As to the increase recommended by the OCA to the ISA rate, the OCA submits that the 15.56% increase proposed by the OCA is appropriate, and will result in just and reasonable rates. PP&L has argued that a contract it has with the ISA customer prevents it from increasing revenues by more than 0.15%. The OCA submits, however, that it is within the Commission's discretion to set a just and reasonable rate for this customer in this case, regardless of the rate set forth in the contract. When the Commission reviewed this contract in 1988, it specifically stated:

> After investigation and analysis of the tariff filing and supporting data, it does not appear that the proposed supplement and the related rate service agreements are unlawful, unjust, unreasonable, or contrary to the public interest. This does not constitute a determination of the lawful, just and reasonable rates to be charged by Respondent. Rather, this is a determination that suspension or further investigation of the tariff filing is not warranted at this time;

Pennsylvania Public Utility Commission v. Pennsylvania Power & Light Company, Docket No. R-881170 (Order entered January 27, 1989)(attached hereto as Appendix C). It is clear from the language of this Order that the Commission has not approved this rate as a just and reasonable rate. As such, it is within the Commission's discretion to consider appropriate revenue allocations for this class in this proceeding. See, e.g., Pennsylvania Public Utility Commission v. Roaring Creek, 73 Pa. PUC 373, 431 (1990).

The OCA submits that its revenue allocation proposal in this proceeding is reasonable. The OCA's proposal is based on a cost of service methodology that properly allocates costs, and its

revenue allocation has been guided by the principle of gradualism. As such, the OCA's proposed revenue allocation should be adopted.

2. Other Parties Revenue Allocation Proposals Should Not Be Accepted By The Commission.

PPLICA witness Baron, UCC witness Eisdorfer, and OTS witness Yarolin have made revenue allocation proposals that differ from the Company's proposal. The OCA submits, however, that these proposals should not be accepted by the Commission.

Mr. Baron's proposed revenue allocation uses as its starting point the Company's 12 CP cost of service study. As the OCA has demonstrated above, however, the Company's proposed study improperly overallocates costs to the residential classes. Thus, Mr. Baron's revenue allocation, based on this study, improperly assigns a larger percentage increase to the residential class than is reasonable and appropriate.

UCC witness Eisdorfer bases his revenue allocation on the use of a cost study in which all production investment is allocated on the basis of winter peak demands. OCA St. 3A at 10. As OCA witness Johnson demonstrated in his direct testimony, however, use of only the winter peak demands improperly ignores the impact of the summer peak demands on PP&L's costs. OCA St. 3 at 12. As PP&L witness Sipics has testified, increases in the summer peak demand would increase the Company's obligation to PJM. Tr. 274. As such, the use of only the three winter peaks, without regard to the summer peaks is improper. Moreover, UCC witness Eisdorfer ignores the contribution of the classes to the average or energy demand.

Ignoring the energy demand will also result in a misallocation of costs, as does the Company's study which also contains this flaw.

Based on this flawed cost of service study, Mr. Eisdorfer proposes a 35.1% increase in RTS rates (over three times the system average) and a 25.5% increase in RS rates. OCA St. 3 at 10. The OCA submits that these proposals fail to meet the commonly used objective of gradualism in changing rates. Mr. Eisdorfer's proposal is excessive, unreasonable, and should be rejected by the Commission.

OTS witness Yarolin has relied on the Company's cost of service study in making his recommendation for the allocation of the OTS' proposed revenue increase of $17 million. Tr. 1101. Mr. Yarolin has recommended that if the Company receives a revenue increase of approximately $17 million, as recommended by the OTS, the entire increase should be allocated to the RTS and RS rate schedules. OTS St. 3 at 10-11. This would be accomplished by adopting the Company's proposed percentage increases for these classes of 17.39% and 15.29%. If the Commission awards a higher increase, Mr. Yarolin recommends that the first $17 million be recovered from the RTS and RS class as he proposed, and the additional revenues be recovered from the remaining rate classes (excluding RTS) in proportion to the Company's proposal. OTS St. 3 at 10-11.

The OCA submits that to the extent that OTS witness Yarolin relied on the Company's cost analyses, he has relied on a study that is flawed. OCA witness Johnson explained:

> Reliance on the Company's cost-of-service study also suffers from the same problem, i.e., the Company's study possesses flaws I describe in earlier testimony, particularly the cost allocation to the RTS class that over-allocates production capacity costs to RTS customers.

OCA St. 3A at 12. The OCA submits that the Company's flawed analysis cannot serve as the basis for setting the RTS and RS rates in this proceeding.

3. Conclusion.

For the reasons set forth above, the OCA submits that its proposed revenue allocation is reasonable and should be adopted in this proceeding. The OCA's proposed revenue allocation is guided by a cost of service study that properly reflects cost responsibility, and it implements the principles of gradualism by restricting the increase to 1.33 times the system average for any one class.

E. RTS Rate Issues.

1. Background On The RTS Rate Issues.

In this case, significant concerns have been raised about the RTS Rate Schedule. The Company, based on its cost of service study which showed a negative rate of return for this class, has proposed a 17.39% increase for these customers, at least two percentage points greater than the increase proposed for the RS customers. In addition, many RTS customers will experience increases much larger than 17.39% due to large proposed increases in the customer charge, as well as increases in the demand charge. See, e.g., PP&L Exh. OGK-9. The OCA submits that such a significant increase for these customers above the system average

increase is improper given the circumstances surrounding this rate schedule.

The RTS rate was available to customers who were utilizing an electric residential thermal storage heating system. Initially, the RTS rate was intended to be an off-peak rate that would provide certain system benefits. Dr. Johnson explained the tradeoff in the RTS rate:

> RTS is intended to be an off-peak rate and to provide lower prices to customers who are willing to incur the inconvenience of the tariff conditions in return for the lower-than-average costs these customers impose on the system.

St. 3 at 26.

As evidenced from the significant testimony at the public input hearings, many customers made significant capital investment in their homes in order to take advantage of this rate. See, e.g., Public Input Tr. 701 (Bethlehem, April 6, 1995). These customers were encouraged by PP&L to install this special equipment in their homes to take service under RTS, and many believed they were not only taking an economically correct action, but were taking a responsible civic action. OCA St. 3 at 20. As an RTS customer testified at the Bethlehem Public Input:

> I felt that it was a good faith joint venture with PP&L to use off-peak demand, which should be beneficial for both, and help conserve energy.

Bethlehem Public Input Tr. 616.

The Public Input testimony of many of these customers identified the large capital investments and the savings from this

expenditure that the Company promised to them. Some of these customers testified as follows:

> [I] am an RTS customer of PP&L, and I spent about $9,000 installing the RTS system in my home in 1992 as opposed to about $4,500 for an alternate heating system of equal quality. I based my decision on spending that kind of additional money in the fact that PP&L led me to believe that I would recover approximately 50 percent of the additional cost in my heating over a five, seven, nine-year period. In the event that they are given a rate increase of the magnitude that they are requesting, at age 62, I don't think I can live long enough to recoup the remaining portion of my additional investment. (Bethlehem Public Input Tr. 701).
>
> I am a residential storage heat customer, and when we invested in PP&L, we took their word on the lower rates that we could have by purchasing the system. When we built our home, we put the system in because we hoped to get qualified for the lower rate. We invested in two 700 foot wells for the groundwater heat source. We invested in storage tanks and the heat pumps. I have a 16 percent rate increase for doing all that and changing from an oil customer. (Wilkes Barre Public Input Tr. 410).

See also, PP&L Exh. OGK-9, Letter from RTS Customer, p. 2.

In addition, some of the witnesses noted the changes in lifestyle that were necessary when they went on the rate. Customers testified:

> In addition to that, I have to pay a very high price, inconvenience price . . .Like for example if Christmas is during the weekend and it is celebrated on Friday or Monday, then the RTS system is not -- in other words, I am not going to have off peak. (Allentown Public Input Tr. 768).
>
> The other thing I think that you should know and probably we discussed earlier is that we're not just being given this break. We do have to make sacrifices. During the hours of 7:00 a.m. to 5 p.m. we only have 80 gallons of hot water. We basically have to use very tepid water, which to

> some people may not be satisfactory, but we've made the choice so that we would have the lower rate. . . . The other thing is we must cycle, as PP&L calls it, electric usage. Those are heating elements like microwave oven, stove burners, the dryer. (Lancaster Public Input Tr. 219-220).

See also, PP&L Exh. OGK-9, Letter from RTS Customer.

A witness at the Allentown Public Input perhaps best summarized the dilemma faced by the RTS customers:

> Having the RTS now, it makes me a captive customer and therefore, I really think I am being penalized by paying the rate, than a non-RTS customer whose rate would go up only nine percent.

Allentown Public Input Tr. 766. This customer also testified that it would cost between $3,000 to $5,000 to return his home to its original heating system Tr. 767. This investment would be in addition to the $5,000 he has already spent to convert to the thermal storage system Id.

Unfortunately, the RTS rate did not work out as the Company intended. Significantly, the Company's winter peak demands now sometimes occur during the off-peak period of the RTS rate schedule when the RTS demands are high. OCA St. 3 at 20. As a result, the rate of return for this class under the cost of service studies is negative.

As Dr. Johnson explained, however, this indicated rate or return is not necessarily appropriate for establishing the RTS class revenue level in this proceeding. Dr. Johnson testified:

> There are reasons that make the indicated rate of return for the RTS class an inappropriate basis for establishing the RTS class revenue. The cost-of-service allocations have been based on historic data and the RTS demands during the winter have been contributing substantially to the system peak

> demand, because the system peak demand has been occurring in the tariff off-peak period.
>
> I note that the winter peak demands usually occur either at 8 o'clock in the morning or 6 or 7 p.m. The RTS contribution to the morning peak is quite modest, but the contributions to the evening peak is four to five times as great. It is my understanding that PP&L intends to install load control devices to prevent this class from making large contributions to the system peak demand. If that occurs, the rate of return in this study may be based on grossly overstated costs for the RTS rate schedule.

OCA St. 3 at 19. Accordingly, the OCA submits that cost of service study results for this class should not be given undue emphasis when determining the appropriate revenue increase for this class.

2. The Rates, Terms And Conditions Of The RTS Rate Schedule Should Be Modified In Accordance With The Recommendation Of the OCA.

Regardless of the reasons, the record is clear that the RTS rate has not produced its intended results, and it is now appropriate to make changes to the terms and conditions of the rate. The OCA submits, however, that any changes to the rate, terms and conditions of the RTS schedule must not be unfair to existing customers. The fact that the Company miscalculated in setting the terms of RTS rate so that the Company's winter peak demand now sometimes occurs during the off-peak period for RTS, is not reason to take a punitive action against these customers without consideration as to the history of how we arrived at this point. OCA St. 3 at 20.

In light of these problems and considerations, OCA witness Johnson has recommended some changes in the RTS rate to try to

mitigate the likelihood of any revenue shortfall growing. Dr. Johnson recommended that the Commission direct the following actions:

1. PP&L should close the rate prospectively at the time of the Commission Order to new customers and grandfather existing locations (not simply the existing customers) so that there is no economic loss to those customers who, in good faith, signed up for service under RTS. (OCA St. 3 at 26)

2. PP&L should be directed to pursue efforts to modify the current rate and service so that the class avoids contributing large demands to the Company's winter monthly peak demands. (OCA St. 3 at 27)

3. Rate increases to this class, now and in the future, should be approximately the same percentage as that received by Rate RS customers so as to maintain the differential between the rate that induced these customers to purchase thermal storage. (OCA St. 3 at 27-28) In the alternative, the Company should maintain the existing 2.3¢/kwh differential between RS and RTS. (OCA St. 3B at 17; Tr. 2154 (correction of rate figure)).

4. If PP&L wishes to continue offering a thermal storage rate to new customers, the Company should develop an appropriate cost-based rate for review by the Commission and interested parties in a separate proceeding. (OCA St. 3 at 27).

The OCA submits that these actions will be a significant step in attempting to rectify the problems identified with the RTS rate, and the Commission should adopt these recommendations.

The Company, in rebuttal, adopted many of Dr. Johnson's recommendations. Specifically, the Company proposed to close the rate and grandfather existing locations. However, it seeks to extend the rate until December 31, 1995. Additionally, the Company agreed to maintain a differential between RS and RTS, but recommended the use of the 2.3¢/kwh differential, which the OCA has

accepted as an alternative. Finally, the Company proposes that the rate differential only be maintained through December 31, 1999. PP&L St. 8-R at 12.

The OCA has two disagreements with the Company's proposal in rebuttal. First, the OCA submits that a date certain, such as December 31, 1999, should not be set for the expiration of the rate differential. Importantly, the RTS customers made large capital investments in these systems, and the life of the system could be as long as twenty years. It is clear from the public input testimony, that the customers expected to maintain a benefit from this capital investment for a substantial period of time. See, e.g., Public Input Tr. 474-475, 769 and PP&L Exh. OGK-9. The OCA would accept that the Company would be free to propose an alternative treatment at the end of this four year period, but review and consideration of the appropriate rate treatment should be based on the then-current facts. OCA St. 3B at 18.

A second disagreement with the Company's proposal regards the timing of the close of the rate. The Company proposes that the rate remain open through December 31, 1995. However, the OCA submits that the RTS rate should close at the time of the issuance of the Commission's Order in this proceeding. OCA St. 3 at 18. As Dr. Johnson explained:

> There is no reason to continue offering and promoting this service if its benefits cannot be sustained in the future. At the very least, if the Company's proposed date is accepted, applicants between now and December 31, 1995 should be informed of the conditions covering the rate before their application is accepted.

OCA St. 3 at 18.[91] As such, the OCA submits that the rate should close to new customers upon issuance of the Commission's Order in this proceeding. In the alternative, the Company should be directed to fully inform all new applicants for this rate schedule of the conditions governing the rate prior to their signing up for service.

3. CEPDFOD's Recommended Modifications May Unreasonably Burden The RTS Customers.

The Central Eastern Fuel Oil Dealers (CEPFOD) have also addressed the issue of the RTS rate. CEPFOD has recommended that the Commission eliminate the RTS rate, and direct the Company to provide monthly refunds to the RTS customers of $50 per month for a period of up to 5 years, but with a minimum of three years. CEPFOD St. 1 at 4. In the alternative, CEPFOD recommends that the Commission freeze the RTS rate, limit access to existing customers to the lesser of eight years of cumulative service or the useful life of the heating system, and increasing the RTS rate by the greater of 17.4% or two times the system average increase approved by the Commission. CEPFOD St. 1 at 4-5.

The OCA has not specifically addressed many of the issues raised by CEPFOD, and takes no position on those issues at this time. However, the OCA submits that the recommendations of CEPFOD

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[91] To the extent the Company is concerned about customers who may be in the process of installing thermal storage systems that might not be completed by the time the Commission's Order is entered, these customers should be properly identified by the Company for consideration. In no event, however, should the Company be permitted to promote this rate after the entry of the Commission's Order.

regarding the treatment of the customers on this rate would unfairly penalize these customers. As CEPFOD witness Anderson agreed on cross-examination, he has conducted no analysis to determine whether his proposed $50 per month credit to the customers is compensatory for the increased costs these customers would experience by being moved to the RS rate over the remaining life of the thermal storage system. Tr. 1311. As noted in Dr. Anderson's testimony, and by witnesses at the public input hearings, thermal storage systems use more energy than conventional heating systems. CEPFOD St. 1 at 8; Tr. 1310; Allentown Public Input Tr. 785. Thus, moving these customers to the RS rate would not only eliminate the savings they expected from the large capital investment in a thermal storage system, but would also result in higher average bills than the conventional heating customers on the RS rate.

The OCA submits that its proposal for the RTS rate, accepted in significant part by the Company, most reasonably reflects all considerations governing this rate. The approach by CEPFOD, which could result in a significant increase to these customers, is unreasonable given the history and circumstances of this rate.

4. Conclusion

For the reasons set forth above, the OCA submits that the Commission should adopt the recommendations of the OCA regarding this rate. The OCA's proposal on the RTS rate presents a balanced approach that recognizes the concerns of existing customers, and

attempts to mitigate any future revenue shortfalls. The OCA submits that in no event should these customers be unfairly or punitively treated due to the Company's miscalculation of the benefits of this rate to its system.

F. Residential Rate Design Issues.

1. PP&L's Proposed Increase In The Residential Rate Classes Customer Charge Is Unjustified And Should Be Rejected.

PP&L has proposed an increase in the residential customer charge for Rate RS customers of 50%, from $4.80 to $7.20 per month. For the RTS customers, the Company has proposed an increase in the customer charge of 37%, from $10.95 per month to $15.00 per month. The OCA submits that the Company has failed to justify these substantial increases in these customer charges.

The Commission, on numerous occasions, has held that the customer charge should be designed to recover only those costs that are directly associated with the metering and billing of residential customers. In a 1985 West Penn case, the Commission adopted the definition of customer charge presented by Staff witness Strausbaugh. The Commission stated:

> He defined "basic customer costs" as those expenses for items the Company must have in place each month for each customer. This includes the costs for the meter and service drop, meter reading and billings. It excludes consideration of "customer-related" costs of transformation and distribution plant.
>
> * * *
>
> We have adopted the "basic customer cost" method for several major Pennsylvania electric utilities (Staff St. 7, p. 4), and we now conclude that it is likewise appropriate for WPP.

Pennsylvania Public Utility Commission v. West Penn Power Company, 59 Pa. PUC 552, 612, 69 PUR4th 470, 521 (1985).

In three subsequent West Penn rate cases, the Commission affirmed its view that the determination of "basic customer cost" should be limited to costs directly necessary to customer service. See, Pennsylvania Public Utility Commission v. West Penn Power Company, Docket No. R-00942986, slip op. at 104 (Order entered December 29, 1994); Pennsylvania Public Utility Commission v. West Penn Power Company, 79 Pa. PUC 122, 218-220 (1993); and Pennsylvania Public Utility Commission v. West Penn Power Company, 73 Pa. PUC 454, 526-27, 119 PUR4th 110, 182-83 (1990). In addition, the Commission has affirmed this definition of "basic customer cost" in Pennsylvania Public Utility Commission, et al. v. Pennsylvania-American Water Company, Docket No. R-00932670, slip op. at 108-115 (Order entered July 26, 1994).

The OCA submits that PP&L seeks to recover costs in its customer charge that are not properly associated with the "basic customer cost" as defined by the Commission. PP&L witness Kasper testified that his determination of the customer costs was based upon Mr. Kleha's cost of service study. Tr. 687. As OCA witness Johnson explained, however, the Company's determination of its customer cost based on this study included large amounts of allocated costs that are an inappropriate basis upon which to set the customer charge. Dr. Johnson testified:

> All costs in the cost-of-service study that are allocated on the basis of customer numbers or directly assigned as customer costs are included in the $17.51 per month value calculated by PP&L.

> It includes the return on meters, services, the portion of lines and transformers deemed by the Company to be customer related, allocated portions of intangible plant, general plant and working capital; all allocated operating and maintenance expenses; depreciation expense on the above plant; and taxes.

OCA St. 3 at 23.

The Company also produced a calculation of the allocated costs that excluded lines and transformers, which resulted in a $10.71 monthly value. OTS Cross-Examination Exh. 13. However, as Dr. Johnson found, this $10.71 per month cost also included large amounts of allocated O&M expenses, uncollectibles, administrative and general expense, and customer information and services expenses. OCA St. 3 at 24. The OCA submits that these costs are not properly included in the determination of the basic customer costs for determining the customer charge. See, West Penn 1994, supra., slip op. at 104.

Dr. Johnson calculated the residential customer costs following the Commission's definition of "basic customer cost." Dr. Johnson determined that the basic customer costs for the RS class result in a customer charge of $4.73 monthly, below the current RS customer charge of $4.80. OCA St. 3 at 24. For the RTS customer, Dr. Johnson determined a basic customer cost of $8.29 monthly, below the current customer charge of $10.95. OCA St. 3 at 25. Thus, the OCA submits that an increase in the customer charge, particularly one as significant as the 50% increase proposed by PP&L, cannot be justified in this proceeding.

The OCA recommends that the customer charge for the RS class and for the RTS class be maintained at their current levels. Dr. Johnson's analysis demonstrates that these levels are sufficient to recover the costs of billing, metering and services.

2. OTS Proposed Customer Charge Increase Should Not Be Adopted In This Proceeding.

OTS witness Yarolin has also proposed an increase in the customer charge for the RS class from $4.80 per month to $5.90 per month. OTS St. 3 at 4-5. OTS witness Yarolin did not modify the Company's proposed increase in the RTS customer charge. Mr. Yarolin has relied on the Company's class cost of service study for his recommendations. In addition, he has compared PP&L's residential customer charge with those of other Pennsylvania utilities. OTS St. 3, Exh. 3, Sch. 1. The OCA submits that because Mr. Yarolin has relied upon the Company's cost analysis, he has relied upon a customer cost analysis that is flawed. OCA St. 3A at 12.

In addition, the OCA submits that the comparison of the proposed customer charge to other Pennsylvania utilities' customer charges is not persuasive. Each of Pennsylvania's utilities has a rate structure that is unique and based on individual variants. Straight comparisons between utilities do not permit allowance for the many different factors that enter into the calculations. Accordingly, such comparison cannot be relied upon as the basis for any increase in PP&L's customer charge.

As such, the OCA submits that the OTS proposal to increase the RS customer charge should be denied.

3. The Company's Proposal To Increase The Energy Blocks For The RS Class Should Be Rejected.

The Company has proposed to increase the number of energy blocks for residential service (Schedule RS) from the current two blocks to three energy blocks. The Company's proposal uses a declining block structure, with the cents per kwh charge being reduced for each increasing block of energy usage. PP&L's justification for this structure is that it wants to recover additional customer costs in the initial blocks. PP&L St. 8-R at 8. The effect of this energy block design, combined with the Company's proposed increase in customer charge, are increases in the range of 23% for a 500 kwh customer. See, Data Filing Requirements, Part IV, Attachment IV-D-1, p. 4.

The OCA submits that the Company has not justified its proposal to include a third energy block for the residential class. The Company's only justification for this change is to recover additional customer costs in the initial blocks. But as OCA witness Johnson's analysis in this proceeding has demonstrated, the Company's determination of customer costs is overstated. Dr. Johnson explained:

> PP&L's claim was based on the premise that all of the costs of the minimum distribution system are customer related. As described in an earlier section of my testimony, components of the minimum distribution system have the capability of carrying substantial load. Therefore the costs of the minimum distribution system are not fully customer related, but partially demand related and

> do not need to be recovered in the initial blocks, as claimed by PP&L.

OCA St. 3 at 25-26.

In addition, as Dr. Johnson points out, the Company's proposed customer charge, combined with the higher level of recovery in the initial blocks produces even greater revenue than what the Company claimed was customer related. The Company had calculated a customer related monthly cost of $17.51, while the Company's proposal produces a monthly revenue of $20.40--greater than the Company's overstated customer cost. OCA St. 3 at 26.

In rebuttal, PP&L witness Kasper argued that if these costs are demand related, then they should also be recovered in the early blocks of the residential rate. PP&L St. 8-R at 9-10. The Company, however, has provided no reason why these demand related costs should be recovered in the initial blocks. Under the Company's proposal, however, the Company would recover almost all of the difference in charges between the early blocks and the tail blocks. OCA St. 3B at 17. This is, in essence, the same as recovering all of the identified costs in the customer charge. Id. The Company's proposal should be rejected.

The OCA submits that the Company has not provided adequate justification for introducing a third block in the residential rate. As such, the Company's proposal to introduce a third energy block should be rejected, and the current two energy block design maintained.

G. OSBA Witness Knecht's Proposal For An Automatic Adjustment In The GS-1 Rate For The Next Ten Years Should Be Rejected.

OSBA witness Knecht has proposed an automatic annual adjustment in rates in each year for the next ten years. Essentially, OSBA witness Knecht proposes to reduce the energy charge in the GS-1 tariff by 2 mils each year and to increase the energy charge for schedules RS, RTS, and GH classes by about 0.24 mils per kwh each year. OSBA St. 1 at 6-7. Mr. Knecht has made his proposal because of the well above average rate of return for the GS-1 class.

The OCA submits that this proposal must be rejected. As OCA witness Johnson explained, an automatic adjustment of this type is not acceptable ratemaking. Dr. Johnson testified:

> This proposal for an automatic adjustment to rates in each of the next ten years based on the Company's class-cost-of-service study is outside the realm of acceptable ratemaking. It is not just that the Company's class-cost-of-service study is flawed, but that no study done today can be expected to represent the allocation of costs accurately over the next ten years. Usage levels change, usage patterns change and other factors affecting cost allocation change. There is no reason to believe that the relative rates of return reflected in a study performed today would still be valid in ten years.

OCA St. 3A at 9.

The OCA submits that OSBA witness Knecht's proposal must be rejected. The OCA and the Company have both proposed increases for the GS-1 class that are substantially below average increases. In addition, the OCA has recommended that if there is a rate reduction, the large decrease be given to the GS-1 class. OCA St. 3A at 9-10. There is simply no basis for taking such extraordinary

actions as those proposed by OSBA witness Knecht outside of the context of a general rate case, utilizing the most current cost-of-service study, when reasonable actions have been recommended to address the higher than average rate of return for the GS-1 class.

H. Conclusion.

The OCA submits that its recommendations concerning cost of service, rate structure and rate design in this proceeding are reasonable. The OCA's recommendations have applied appropriate cost of service and rate design principles. As such, the OCA submits that its recommendations set forth above should be adopted by the Commission.

XI. PP&L'S PROPOSED ECR PASS THROUGH OF CAPACITY COSTS ASSOCIATED WITH EXPIRING OFF-SYSTEM SALES.

A. Introduction

In this case, PP&L has sought authority to charge ratepayers, automatically through the ECR, for the non-energy revenue requirements costs associated with its expiring off-system capacity sales contracts--the first of which begins to expire in 1996. PP&L St. 7 at 22-28. The Company's proposal has the effect of raising its total rate increase request in this case to approximately $440 million, rather than the $261 million identified by the Company. OCA witness Kahal explained:

> The Company is also seeking authority in this case to charge ratepayers for the non-energy revenue requirements associated with the 945 MW slice-of-system under contract to JCP&L, as that contract phases out. According to PP&L response to OCA Set V, item (63), this could add up to $177 million (prior to any fuel savings offsets) to customers if the full 945 MW is returned. In other words, the $261 million is merely the initial rate increase being sought at this time. An additional $177 million is to be phased in, essentially automatically, as the JCP&L capacity returns. Thus, the total rate increase authority requested in this case is on the order of $440 million, making it larger than the rate increase sought by PP&L in 1984 when Susquehanna Unit 2 entered service.

OCA St. 2 at 3 (emphasis added).

The OCA submits that the Company's proposal must be rejected. The proposal to automatically recover capacity costs, that have not been included in jurisdictional rates for nearly 10 years, through an automatic recovery mechanism is improper ratemaking. Moreover, such proposal creates a danger of overearning by the utility, and introduces perverse incentives to

inadequately market the capacity. As such, the OCA submits that the Company's proposal should be rejected. The Company will always retain the right to seek recovery of these costs in rates if the capacity returns, and the Company is unable to market the capacity. At that time, all issues relevant to rate base recovery can be properly examined.

B. The Company's Proposal For Automatic Recovery Of These Non-Energy Revenue Requirements Is Improper.

PP&L has engaged in a number of long-term sales of its capacity to other utilities. In this proceeding, the focus of the Company's proposal has been its long term contract with JCP&L, which begins to expire in 1996.[92] OCA witness Kahal described the Company's contracts as follows:

> As explained by Mr. Kleha, PP&L has engaged in a long-term capacity sale with JCP&L for 945 MW (winter rating) of slice of the system capacity. The contract is scheduled to begin phasing out in 1996, with the phase out to be completed in the year 2000. Unless the capacity sale is renegotiated, renewed or sold to a new wholesale customer, PP&L will receive an increment of 189 MW of additional capacity each year until 2000.

OCA St. 2 at 27.

The non-energy revenue requirements associated with this returning 189 MW increment is $35 million each year. As PP&L witness Kleha explained on cross-examination, this proposal also applies to the Atlantic City Electric contract and the BG&E contracts which are scheduled to expire in the year 2000. Tr. 357.

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[92] In its 1995 ARPR, the Company indicated that it had entered into another contract with JCP&L for the sale of 300 MW of this capacity. On cross examination, Company witness Kleha indicated that this did not affect the Company's proposal.

The $177 million increase does not include the revenue requirement effect of the capacity associated with these two contracts.

The OCA submits that this proposal is improper and should be rejected. PP&L's proposal would essentially circumvent the review of issues critical to the determination of whether inclusion of the costs of the returning capacity in rates will produce rates that are just and reasonable. For example, if automatic recovery of this capacity is allowed, the issue of whether such capacity will constitute excess capacity at the time of its inclusion in rates could not be addressed. As OCA witness Kahal noted, an issue could exist as to whether this returning capacity is excess capacity based on the facts at the time of its return. Mr. Kahal explained:

> According to Mr. Sipics' Exhibit JFS-1, the returning JCP&L capacity would appear to be excess. Consistent with that exhibit, Mr. Kleha gave no indication the returning capacity is in any way needed to serve native load customers in the near term. Moreover, the returning capacity will not replace any planned capacity additions over the next five years or so. Excess capacity, however, is best evaluated at the time it returns to the system.

OCA St. 2 at 28 (emphasis added).

In addition, as PP&L witness Kleha testified on cross-examination, the Company has not proposed any earnings test for its ECR flowthrough proposal. Tr. 365. In other words, the Company would flow through the non-energy revenue requirements of the returning capacity even if it is earning in excess of its authorized rate of return.

The automatic flowthrough of these capacity costs could result in an earnings problem. OCA witness Kahal explained the potential source of this problem as follows:

> Under standard ratemaking, the cost of the utility's existing generating capacity is embedded in the base rates which its customers pay. Witness Slivka is projecting significant system demand growth over the next several years. As the level of sales grows, PP&L generates additional capacity-related base revenue, even though the Company does not need to add new increased capacity to meet this demand growth. The demand growth contributes to PP&L's earnings, offsetting (and possibly even more than offsetting) the need for rate relief.

OCA St. 2 at 29-30. Under PP&L's proposal, however, the Company would receive $35 million per year in additional revenue even though it may be meeting its earnings requirements. Id.

Another problem with the Company's proposal is the perverse incentives that the proposal creates for the Company in the marketing of this capacity off-system. If PP&L fails in its marketing efforts, then it would automatically receive full recovery of its costs from its ratepayers. As OCA witness Kahal testified, this proposal creates a perverse incentive for the Company. Mr. Kahal explained:

> PP&L, under its own proposal, faces one of two possibilities: (1) it may fail to market the returning capacity and therefore would receive automatic full cost recovery for the capacity through the ECR; or (2) it may successfully market the capacity and thereby accept whatever revenue the market provides. If, however, PP&L can only market the capacity at revenue levels below its full cost of service that would be automatically included in the ECR, PP&L has little incentive to market this surplus capacity. Rather, its most attractive option is to accept ECR recovery for

these capacity costs from its Pennsylvania ratepayers.

OCA St. 2 at 29. As can be seen, the Company's proposal provides an unacceptable incentive to the Company.

The OCA submits that the Company's proposal is improper for ratemaking purposes. It does not adequately ensure that rates to be paid by ratepayers are just and reasonable, or that the proper incentive is given to the utility. As such, the Company's proposal should be rejected.

C. PP&L's Arguments In Rebuttal Do Not Overcome The Concerns With This Extraordinary Ratemaking Mechanism.

In rebuttal, the Company advanced several defenses of its proposal. First, PP&L witness Kleha argued that the Company's proposal provides customers with two important benefits--the avoidance of rate cases, and the flow back of revenues from off-system sales related to the capacity. PP&L St. 7-R at 33. Second, PP&L witness Kleha argues that the proposal is reasonable because the capacity costs are known and measurable and it would avoid the "enormous costs and regulatory burden" of PP&L filing annual rate cases. PP&L St. 7-R at 33. Third, Mr. Kleha argues that if overearnings is a concern, then the consumer representatives always have the option of filing a complaint if they believe that PP&L is overearning. PP&L St. 7-R at 34. In addition, as an alternative proposal, Mr. Kleha argues that if the Commission disallows the ECR flowthrough of these costs, then the Commission must permit the Company to retain the energy savings associated with this capacity.

Id. at 34-35. The OCA submits that these arguments do not meet the substantial concerns raised by this special ratemaking request.

The special ratemaking mechanism that the Company requests blunts the Company's incentives for cost control. OCA St. 2 at 33. Under the Company's proposal, the costs would not be subject to the usual review and scrutiny of a rate case. OCA St. 2A at 34. Moreover, the OCA disagrees that these costs are "known and measurable" at this time. As Mr. Kleha admitted, revenue requirements can fall over time given changes in operation and maintenance costs and overall capital costs. Tr. 364. In addition, PP&L is contemplating a number of cost control measures at its Susquehanna Station, and the Company has stated that it is unsure as to what the environmental retrofit requirements will be for its coal units. OCA St. 2A at 34. Given these facts, it is apparent that these costs are not "known and measurable," and it is apparent that the costs should not avoid the rate case review process by the establishment of an automatic recovery mechanism in this case. The Company's suggestion that ratepayer representatives should file an overearnings complaint if any of this is a problem is both impractical, and contradicts the argument that there would be savings of regulatory resources. OCA St. 2A at 34.

Moreover, PP&L's proposal is a one-sided proposal that would pass on a cost increase but would not recognize factors which decrease rates such as retail sales growth and savings from cost control. OCA St. 2A at 34. Although PP&L does agree to the flow through of any installed capacity credit sales related to the

capacity, such revenues are not fully compensatory. OCA St. 2A at 34.

Finally, PP&L's argument that it be permitted to retain the energy savings from this capacity if its proposal is denied is not reasonable in the context of this proceeding. In this case, no party is arguing that PP&L be denied the opportunity to seek ratemaking recovery of these costs. The parties are arguing that PP&L's proposal in this case for blanket advanced approval of extraordinary ratemaking treatment of these costs should be denied. In addition, PP&L's alternative proposal would continue to allow PP&L to selectively pick the ratemaking treatment that is most advantageous to it at a particular point in time. OCA witness Kahal explained:

> Under Mr. Kleha's new proposal, PP&L will have several ratemaking options which it can exercise as it sees fit based on whatever is most advantageous to PP&L at the time: (1) base rate recovery; (2) off-system sales in the unregulated wholesale market; or (3) retention of energy savings below the line if the capacity is not in base rates. A blanket advanced approval of this proposal means that PP&L can selectively determine from time-to-time which ratemaking treatment is most profitable.

OCA St. 2A at 35. As PP&L witness Kleha testified, the energy savings from the first increment of the JCP&L contract could be as high as $15 million. PP&L St. 7-R at 35.

The OCA submits that the proposal of the Company to retain energy savings if its flow through mechanism is denied should not be approved at this time. Such a proposal could result in ratepayers paying energy rates through the ECR that are higher than

the Company's actual cost of energy supply, and this could occur at a time when the Company is overearning. OCA St. 2A at 35. The OCA submits that PP&L should retain the right to make such a request in an individual ECR case, and the proposal can then be evaluated based on the circumstances at that time.

D. Conclusion

For the reasons set forth above, the OCA submits that the Company's proposal for the automatic recovery of non-energy requirements costs associated with its expiring off-system sales is improper ratemaking. The proposal avoids the rate case review process, creates a danger of overearnings, and introduces perverse incentives regarding the marketing of this capacity. As such, the OCA submits that this proposal should be rejected.

XII. FINANCIAL IMPACT

In the rebuttal phase of the hearing, PP&L, through the testimony of Michael J. Berish, responded to the OCA's recommendation that PP&L's request for a rate increase be denied and that the Company should instead reduce its existing rates by $73.1 million.[93] PP&L St. 2R at 18-19. Mr. Berish argued that if the OCA's recommendations were adopted, the Company's earnings would drop. Mr. Berish also predicted that under the OCA recommendation, PP&L's 1996 return on equity would decline to 7.5 percent, and its pre-tax coverage ratio would decline to 2.7x. Id.

The OCA submits that Mr. Berish's argument that the OCA's recommendations would unreasonably impair PP&L's financial condition is based on incorrect assumptions and must be dismissed. The OCA submits that, as set forth fully in this Main Brief, the Company's claim for a $261 million rate increase is not supported by the evidence of record and must be modified in accordance with the recommendations of the OCA and other parties in this case.

The OCA submits that Mr. Berish's predictions of an earnings decrease is actually nothing more than a reflection of the rate case disagreements in this case over cost data and accounting treatments. OCA St. 1B at 10. Mr. Berish has based his earnings projections upon his cost of service estimates, which the OCA has shown are unsupported, rather than the fully supported cost of service estimate of OCA witness Catlin. Id.

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[93] In surrebuttal, the OCA revised its recommendation to a rate decrease of $66,464,000. See OCA St. 6A, Sch. TSC-1.

Moreover, Mr. Berish ignores that fact that the OCA's recommendation in this case is targeted to a return on equity, as revised, of 11.1%.[94] As OCA witness Kahal explained, this recommendation provides adequate coverage for the Company to maintain a single A bond rating. Mr. Kahal testified:

> I have already demonstrated (using Mr. Moul's pro forma technique), that this translates into a pre-tax coverage ratio of 3.5x, an entirely adequate coverage for sustaining a single A bond rating.

OCA St. 1B at 10.

The OCA submits that its pro forma ratemaking adjustments, and its recommendation in this case are reasonable, and fully supported by Commission precedent, case law, and the record. The OCA submits that these adjustments must be evaluated on their overall merits and not simply upon their predicted impact on the Company's financial ratios.

The OCA would also note that Mr. Berish's predictions of weak earnings for 1996 may be due, in part, to the expected poor performance in the wholesale jurisdiction. As Mr. Kahal explained:

> My second concern is that the weak earnings predicted for 1996 may be due to expected poor performance in the wholesale (i.e., FERC) jurisdiction. This may be due to a combination of market-based pricing and the JCP&L capacity phase-out. PP&L's prediction of weak performance in the

---

[94] The two exceptions which would reduce the Company's equity return are the OCA's recommended disallowance of the equity return on Susquehanna 2, and the OCA's recommended sharing of the economic development revenue shortfalls. The OCA submits, though, that these two adjustments must be evaluated on their own merits, based upon existing case law, Commission precedent, Commission policy, and the record in this case. These adjustments cannot be dismissed simply because the Company predicts that it might experience reduced earnings as a result.

> wholesale market should not serve as a reason to increase the Pennsylvania jurisdictional rates in this case.

OCA St. 1B at 10.

The OCA submits that Mr. Berish's projections are unreliable, and these projections should not form the basis for dismissing the OCA's set of recommendations in this case. The OCA's adjustments in this case are supported by the evidence of record, reasonable, and in accordance with the Public Utility Code. As such, the OCA submits that its recommendations in this proceeding should be adopted.

XIII. CONCLUSION

For the reasons set forth above, the Office of Consumer Advocate respectfully submits that Pennsylvania Power & Light Company proposed Tariff Supplement No. 50 to Tariff Electric - Pa. P.U.C. No. 200 should be rejected. The rates contained in this supplement are not just and reasonable or otherwise in accordance with the Public Utility Code and sound ratemaking principles. The Public Utility Commission should issue an Opinion and Order directing Pennsylvania Power & Light Company to file appropriately designed tariffs which will reduce its rates by $66,464,000.

Respectfully submitted,

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Assistant Consumer Advocate

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Dated: June 16, 1995
20010

APPENDIX A

TABLE 1

PENNSYLVANIA POWER & LIGHT COMPANY

Summary of Operating Income
Test Year Ending September 30, 1995
($000)

	Revenues At Present Rates	OCA Adjustments	Adjusted Per OCA	Proforma Increase	Proforma
Operating Revenues	$2,401,887	$12,666	$2,414,553	($66,464)	$2,348,089
Operating Expenses					
Operation & Maintenance	1,375,408	(81,741)	1,293,667	0	1,293,667
Depreciation	320,797	(40,757)	280,040	0	280,040
Regulatory Debits and Credits	(29,208)	0	(29,208)	0	(29,208)
Taxes Other Than Income	186,536	(188)	186,348	(3,389)	182,959
Federal Income Tax	153,502	20,039	173,541	(19,650)	153,891
State Income Tax	54,091	7,905	61,996	(6,932)	55,064
Deferred Income Tax	(15,424)	14,265	(1,159)	0	(1,159)
Investment Tax Credit	(8,625)	0	(8,625)	0	(8,625)
Total Taxes	370,080	42,021	412,101	(29,971)	382,130
Gain From Disposition of Emission Allowances	(466)	0	(466)	0	(466)
Total Operating Expenses	$2,036,611	($80,477)	$1,956,134	($29,971)	$1,926,163
Net Utility Operating Income	$365,276	$93,143	$458,419	($36,493)	$421,926 (A)
Rate Base	$5,017,708		$4,937,249		$4,937,249
Rate of Return	7.28%		9.28%		8.55%

Note:
(A) Includes reduction of $35,757 in Net Income to reflect excess capacity disallowance of the return on equity for Susquehanna No. 2.

TABLE II

PENNSYLVANIA POWER & LIGHT COMPANY

Summary of Adjustments
Test Year Ending September 30, 1995
($000)

	Exhibit Reference	Rate Base	Revenues	Operation & Maintenance	Gains on Allow. and Reg. Debits & Credits	Depreciation & Amortization	Taxes Other Than Income	State Income Tax	Federal Income Tax	Deferred Federal Income Tax	Investment Tax Credit	Net Operating Income
Per Company		$5,017,708	$2,401,887	$1,375,408	($29,674)	$320,797	$186,536	$54,091	$153,502	($15,424)	($8,625)	$365,276
OCA Adjustments:												
Accrued Pensions	Schedule TSC - 3	(74,034)										
Prepayments	Schedule TSC - 5	(9,012)										
Cash Working Capital Study	Schedule TSC - 6	2,587										
Benefits Savings	Schedule TSC - 8			(171)				19	53			99
Postretirement Benefits - Discount Rate	Schedule TSC - 9			(416)								416
Pension Expense - Discount Rate	Schedule TSC - 10			(7,056)								7,056
Prior Period SFAS No. 106 Costs	Schedule TSC - 11			(1,555)				171	484			900
Disallow SFAS No. 112	Schedule TSC - 12			(592)								592
Revision of Nuclear Decommisssioning Funding	Schedule TSC - 14			(11,593)				1,174	3,326			7,093
Nuclear Decommisssioning Costs Disallowance	Schedule TSC - 15			(5,022)				546	1,548			2,928
Fossil Decommissioning Expense	Schedule TSC - 16			(45,284)				4,977	14,107			26,200
Susquehanna Early Window Deferrals	Schedule TSC - 17			(3,922)								3,922
Susquehanna Refueling Outage Costs	Schedule TSC - 18			(1,111)				122	346			643
Depeciation Expense	Schedule TSC - 20					(40,757)				14,265		26,492
EDI/IDI Credits	Schedule TSC - 21		12,666				557	1,331	3,772			7,006
Uncollectibles From Gross Receipts Tax	Schedule TSC - 22						(745)	82	232			431
Eliminate Additions to Taxable Income	Schedule TSC - 23							(1,066)	(3,023)			4,089
Eliminate Potential Tax Deficiencies	Schedule TSC - 24							(213)	(804)			1,017
Consolidated Tax Savings	Schedule TSC - 25								(2,161)			2,161
Interest Synchronization	Schedule TSC - 26							210	596			(806)
VERP Amortization	Schedule TSC - 28			(5,019)				552	1,563			2,904
Total OCA Adjustments		($80,459)	$12,666	($81,741)	$0	($40,757)	($188)	$7,905	$20,039	$14,265	$0	$93,143
Total Adjusted per OCA		$4,937,249	$2,414,553	$1,293,667	($29,674)	$280,040	$186,348	$61,996	$173,541	($1,159)	($8,625)	$458,419

PENNSYLVANIA POWER & LIGHT COMPANY

Summary of Operating Income
Test Year Ending September 30, 1995
($000)

	Pennsylvania Jurisdictional Revenues At Present Rates	OCA Adjustments	Adjusted Per OCA	Proforma Increase	Proforma
Operating Revenues	$2,401,887	$12,666	$2,414,553	($66,464)	$2,348,089
Operating Expenses					
Operation & Maintenance	1,375,408	(81,741)	1,293,667	0	1,293,667
Depreciation	320,797	(40,757)	280,040	0	280,040
Regulatory Debits and Credits	(29,208)	0	(29,208)	0	(29,208)
Taxes Other Than Income	186,536	(188)	186,348	(3,389)	182,959
Federal Income Tax	153,502	20,039	173,541	(19,650)	153,891
State Income Tax	54,091	7,905	61,996	(6,932)	55,064
Deferred Income Tax	(15,424)	14,265	(1,159)	0	(1,159)
Investment Tax Credit	(8,625)	0	(8,625)	0	(8,625)
Total Taxes	370,080	42,021	412,101	(29,971)	382,130
Gain From Disposition of Emission Allowances	(466)	0	(466)	0	(466)
Total Operating Expenses	$2,036,611	($80,477)	$1,956,134	($29,971)	$1,926,163
Net Utility Operating Income	$365,276	$93,143	$458,419	($36,493)	$421,926
Rate Base	$5,017,708		$4,937,249		$4,937,249
Rate of Return	7.28%		9.28%		8.55%

PENNSYLVANIA POWER & LIGHT COMPANY

Determination of Revenue Decrease
Test Year Ending September 30, 1995
($000)

		Amount	Source
OCA Recommended Rate Base		$4,937,249	Schedule TSC-2, Page 1
Required Rate of Return		9.27%	Schedule MIK-1, Page 1
Net Operating Income Required		$457,683	
Less: Excess Capacity Adjustment		(35,757)	Schedule MIK-13
Adjusted Net Operating Income Required		421,926	
Net Operating Income at Present Rates		458,419	Schedule TSC-1, Page 1
Income Surplus		($36,493)	
Revenue Multiplier		1.8213	
Revenue Decrease Required		($66,464)	
Revenue Decrease Required		($66,464)	
PA Gross Receipts Tax	4.40%	(2,924)	
PA Capital Stock Tax	0.70%	(465)	
Subtotal		($63,075)	
State Income Tax at	10.99%	(6,932)	
Subtotal		($56,143)	
Federal Income Tax at	35.00%	(19,650)	
Net Income Decrease Required		($36,493)	

PENNSYLVANIA POWER & LIGHT COMPANY

Summary of Rate Base Adjustments
Test Year Ending September 30, 1995
($000)

	Amount	Source
Rate Base per Company Filing	$5,017,708	Schedule TSC - 2, Page 1
OCA Adjustments:		
Accrued Pensions	(74,034)	Schedule TSC - 3
Accumulated Deferred Income Taxes Associated With Loss On Required Debt	0	See Note (1)
Prepayments	(9,012)	Schedule TSC - 5, Updated
Cash Working Capital Study	2,587	Schedule TSC - 6, Updated
Total OCA Adjustments	($80,459)	
OCA Adjusted Rate Base	$4,937,249	

Note:
(1) Adjustment to recognize ADIT associated with the loss on reacquired debt has been accounted for in the cost of debt.

PENNSYLVANIA POWER & LIGHT COMPANY

Summary of Rate Base
Test Year Ending September 30, 1995
($000)

	Per Company	OCA Adjustments	Adjusted Per OCA
Utility Plant In Service			
Electric Plant in Service	$8,196,706	$0	$8,196,706
Accumulated Depreciation	(2,477,122)	0	(2,477,122)
Net Electric Plant in Service	5,719,584	0	5,719,584
Pollution Control Projects (Net of Retirements)	12,378	0	12,378
Total Utility Plant In Service	5,731,962	0	5,731,962
Working Capital			
Cash Working Capital	0	(6,425)	(6,425)
Fuel Stock And Materials & Supplies	188,808	0	188,808
Total Working Capital	188,808	(6,425)	182,383
Accumulated Deferred Income Taxes	(901,916)	34,053	(867,863)
Customer Advances For Construction	(40)	0	(40)
Customer Deposits	(1,106)	0	(1,106)
Accrued Pensions	0	(108,087)	(108,087)
Total Rate Base	$5,017,708	($80,459)	$4,937,249

PENNSYLVANIA POWER & LIGHT COMPANY

Adjustment to Recognize
Accrued Pensions as a Rate Base Deduction
Test Year Ending September 30, 1995
($000)

	Total Company	Pennsylvania Jurisdictional (1)
Balance of Accrued Pensions as of 9/30/94 (2)	$104,401	$ 90,361
VERP Amortization for Test Year (3)	11,080	9,590
Pension Accrual for Test Year (4)	0	0
Projected Balance at 9/30/95	$115,481	$99,951
Deferred Taxes on Accrued Pension Balance as of 9/30/94 (2)	$(39,344)	(34,053)
Accrual Related to VERP Amortization (5)	(4,742)	(4,104)
Amount related to Pension Cost Capitalized as of 9/30/95 (2)	14,142	12,240
Projected Balance at 9/30/95	$(29,944)	$(25,917)
Net Rate Base Deduction	$ 85,537	$ 74,034

Notes:

(1) Reflects factor of 86.5518% applicable to pension expense per response to OTS-RE-3D.

(2) Per response to OCA IV-129, revised 3/27/95.

(3) Reflects 5 year amortization of final VERP pension supplement per response to OCA IV-75.

(4) Reflects OCA recommendation per Schedule TSC-10.

(5) Represents one-fifth of amount for VERP per response of OCA IV-129 (Revised 3/27/95).

Docket No. R-00943271
Schedule TSC-5
Updated 5/19/95

PENNSYLVANIA POWER & LIGHT COMPANY

Adjustment to Prepayments
Test Year Ending September 30, 1995
($000)

	Total Company	Pennsylvania Jurisdictional
Eliminate Prepaid Insurance		
Nuclear (1)	$(2,264)	$(1,776)
Other (1)	(3,283)	(2,767)
Total	$(5,547)	$(4,543)
Revise PUC Annual Assessment		
Corrected Average Balance (2)	1,782	1,782
Amount per Company Rebuttal Filing (1)	1,782	1,782
Adjustment	$ 0	$ 0
Other Prepayments		
Remove Interest & Preferred Dividends included in March Balance (3)	(5,164)	(4,469)
Total Adjustments to Prepayments	$(10,711)	$(9,012)

Notes:

(1) Per Schedule C-4, page 3 of Exhibit Future 1-Revised.

(2) Per response to OTS-RE-28D

(3) Reflects March balance of $67,130 per response to OTS-RE-21D divided by 13 months.

Docket No. R-00943271
Schedule TSC-6
Updated 5/19/95

PENNSYLVANIA POWER & LIGHT COMPANY

Adjustment to Cash Working Capital
Test Year Ending September 30, 1995
($000)

	Pennsylvania Adjusted Jurisdictional Amount		OCA Adjustments	OCA Adjusted Expenses	Average Daily Amount	(Lead)/Lag Days	Net (Lead)/Lag Days (Ratio)	Cash Working Capital Requirement
Operation & Maintenance Expense	$1,358,476	1/	($81,741)	$1,276,735	$3,498	31.5	3.5	$12,243
Interest on Long-term Debt	186,072	2/	(1,913)	184,159	$505	91.3	(56.3)	(28,432)
Preferred Dividends	27,840	2/	(1,179)	26,661	$73	45.6	(10.6)	(774)
Accrued Taxes								
Federal Income Tax	153,502	3/	389	153,891			-6.72%	(10,341)
State Income Tax	54,091	3/	973	55,064			-11.72%	(6,454)
PA Gross Receipts Tax	98,400	3/	(3,112)	95,288			22.87%	21,792
PA Capital Stock Tax	30,553	3/	(465)	30,088			-11.72%	(3,526)
PA Public Utility Realty Tax	38,783	3/	0	38,783			14.53%	5,635
Total	$1,947,717		($5,306)	$1,860,670				($9,857)
Amount Per Company								(12,444)
Adjustment to Cash Working Capital								$2,587

Notes:

1/ PP&L Exhibit Future 1 - Revised, Schedule D-1, Column (6), Line 2 minus uncollectibles.

2/ Rate Base multiplied by the long-term debt and preferred debt ratios.

3/ Pennsylvania Jurisdictional amount at present rates.

PENNSYLVANIA POWER & LIGHT COMPANY

Summary of Adjustments to Net Income
Test Year Ending September 30, 1995
($000)

	Pennsylvania Jurisdictional Amount	Source
Net Income per Company	$365,276	PP&L Exhibit Future 1 - Revised
OCA Adjustments:		
Benefits Savings	99	Schedule TSC - 8
Postretirement Benefits - Discount Rate	416	Schedule TSC - 9
Pension Expense - Discount Rate	7,056	Schedule TSC - 10, Updated
Prior Period SFAS No. 106 Costs	900	Schedule TSC - 11, Updated
Disallow SFAS No. 112	592	Schedule TSC - 12
Interest on Customer Deposits	0	See Note (1)
Revision of Nuclear Decommisssioning Funding	7,093	Schedule TSC - 14
Nuclear Decommisssioning Costs Disallowance	2,928	Schedule TSC - 15
Fossil Decommissioning Expense	26,200	Schedule TSC - 16, Updated
Susquehanna Early Window Deferrals	3,922	Schedule TSC - 17, Updated
Susquehanna Refueling Outage Costs	643	Schedule TSC - 18
Environmental Remediation	0	See Note (2)
Depeciation Expense	26,492	Schedule TSC - 20, Updated
EDI/IDI Credits	7,006	Schedule TSC - 21
Uncollectibles From Gross Receipts Tax	431	Schedule TSC - 22
Eliminate Additions to Taxable Income	4,089	Schedule TSC - 23, Updated
Eliminate Potential Tax Deficiencies	1,017	Schedule TSC - 24
Consolidated Tax Savings	2,161	Schedule TSC - 25
Interest Synchronization	(806)	Schedule TSC - 26, Updated
VERP Amortization	2,904	Schedule TSC - 28
Total OCA Adjustments	$93,143	
Total Adjusted Income per OCA	$458,419	

Notes:
(1) Adjustment has been reflected to PP&L's updated claim and is, therefore, no longer necessary.
(2) Adjustment is no longer being proposed based on updated information.

PENNSYLVANIA POWER & LIGHT COMPANY

Summary of Adjustments to Net Income
Test Year Ending September 30, 1995
($000)

	Revenues	Operation & Maintenance	Gains on Allow. and Reg. Debits & Credits	Depreciation & Amortization	Taxes Other Than Income	State Income Tax	Federal Income Tax	Deferred Federal Income Tax	Investment Tax Credit	Net Operating Income
Net Income per Company	$2,401,887	$1,375,408	($29,674)	$320,797	$186,536	$54,091	$153,502	($15,424)	($8,625)	$365,276
OCA Adjustments:										
Benefits Savings	0	(171)	0	0	0	19	53	0	0	99
Postretirement Benefits - Discount Rate	0	(416)	0	0	0	0	0	0	0	416
Pension Expense - Discount Rate	0	(7,056)	0	0	0	0	0	0	0	7,056
Prior Period SFAS No. 106 Costs	0	(1,555)	0	0	0	171	484	0	0	900
Disallow SFAS No. 112	0	(592)	0	0	0	0	0	0	0	592
Interest on Customer Deposits	0	0	0	0	0	0	0	0	0	0
Revision of Nuclear Decommisssioning Funding	0	(11,593)	0	0	0	1,174	3,326	0	0	7,093
Nuclear Decommisssioning Costs Disallowance	0	(5,022)	0	0	0	546	1,548	0	0	2,928
Fossil Decommissioning Expense	0	(45,284)	0	0	0	4,977	14,107	0	0	26,200
Susquehanna Early Window Deferrals	0	(3,922)	0	0	0	0	0	0	0	3,922
Susquehanna Refueling Outage Costs	0	(1,111)	0	0	0	122	346	0	0	643
Environmental Remediation	0	0	0	0	0	0	0	0	0	0
Depeciation Expense	0	0	0	(40,757)	0	0	0	14,265	0	26,492
EDI/IDI Credits	12,666	0	0	0	557	1,331	3,772	0	0	7,006
Uncollectibles From Gross Receipts Tax	0	0	0	0	(745)	82	232	0	0	431
Eliminate Additions to Taxable Income	0	0	0	0	0	(1,066)	(3,023)	0	0	4,089
Eliminate Potential Tax Deficiencies	0	0	0	0	0	(213)	(804)	0	0	1,017
Consolidated Tax Savings	0	0	0	0	0	0	(2,161)	0	0	2,161
Interest Synchronization	0	0	0	0	0	210	596	0	0	(806)
VERP Amortization	0	(5,019)	0	0	0	552	1,563	0	0	2,904
Total OCA Adjustments	$12,666	($81,741)	$0	($40,757)	($188)	$7,905	$20,039	$14,265	$0	$93,143
Total Adjusted Income per OCA	$2,414,553	$1,293,667	($29,674)	$280,040	$186,348	$61,996	$173,541	($1,159)	($8,625)	$458,419

PENNSYLVANIA POWER & LIGHT COMPANY

Adjustment to Recognize Benefits Savings
Associated with Year End Employees & Wages
Test Year Ending September 30, 1995
($000)

	Total Company	Pennsylvania Jurisdictional (1)
Adjustments to Reflect Year End Wages (2)	$(916)	(793)
Benefits and Payroll Tax Ratio (3)	31.3%	31.3%
Adjustment to Benefits Expense	$(287)	$(248)
Percent to O&M (4)	68.7%	68.7%
Adjustment to O&M	$(197)	$(171)
State Income Tax at 10.99%	22	19
Federal Income Tax at 35%	61	53
Adjustment	$ 114	$ 99

Notes:

(1) Reflects ratio of 86.5872% per Exhibit JMK-2.

(2) Per Schedule D-5 of Exhibit Future 1.

(3) Per response to OCA IV-75.

(4) Ratio applicable to benefits per Exhibit Future 1, Schedules D-6 and D-10.

PENNSYLVANIA POWER & LIGHT COMPANY

Adjustment to Postretirement Benefits Expense
to Reflect Revised Discount Rate
Test Year Ending September 30, 1995
($000)

	Total Company	Pennsylvania Jurisdictional (1)
Change in Postretirement Benefits Cost Resulting from Updating Discount Rate to 8.5% (2)	$(700)	$(606)
Percent to O&M (3)	68.7%	68.7%
Adjustment to O&M Expense	$(481)	$(416)
State Income Tax (4)	0	0
Federal Income Tax (4)	0	0
Adjustment to Net Income	$481	$416

Notes:

(1) Reflects ratio of 86.5518% per Exhibit JMK-2 and response to OTS-RE-3D.

(2) Per response to On the Record Data Request DR-OCA-1.

(3) Per Schedule D-6 of Exhibit Future 1.

(4) Adjustment has no income tax effects since expense was not recognized as tax deductible in Company's filing.

Docket No. R-00943271
Schedule TSC-10
Updated 5/19/95

PENNSYLVANIA POWER & LIGHT COMPANY

Adjustment to Pension Expense
to Reflect Revised Discount Rate
Test Year Ending September 30, 1995
($000)

	Total Company	Pennsylvania Jurisdictional (1)
Pension Cost Per OCA (2)	$ 0	0
Amount per Company Filing (3)	11,867	10,271
Adjustment to Pension Cost	$(11,867)	$(10,271)
Percent to O&M (4)	68.7%	68.7%
Adjustment to O&M Expense	$ (8,153)	$ (7,056)
State Income Tax (5)	0	0
Federal Income Tax (5)	0	0
Adjustment to Net Income	$ 8,153	$ 7,056

Notes:

(1) Reflects ratio of 86.5518% per Exhibit JMK-2 and response to OTS-RE-3D.

(2) Reflects estimated cost based on an 8.5 percent discount rate.

(3) Per Exhibit Future 1-Revised, Schedule D-6.

(4) Percent applicable to benefits per Exhibit Future 1, Schedules D-6 and D-10.

(5) Adjustment has no income tax effects since expense was not recognized as tax deductible in Company's filing.

Docket No. R-00943271
Schedule TSC-11
Updated 5/19/95

PENNSYLVANIA POWER & LIGHT COMPANY

Adjustment to Disallow
Prior Period SFAS No. 106 Costs
Test Year Ending September 30, 1995
($000)

	Total Company	Pennsylvania Jurisdictional (1)
Adjustment to Disallow the Amortization of Prior Period SFAS No. 106 Costs (2)	$(1,797)	$(1,555)
State Income Tax at 10.99%	197	171
Federal Income Tax at 35%	560	484
Adjustment to Net Income	$ 1,040	$ 900

Notes:

(1) Reflects ratio of 86.5518% applicable to benefit per Exhibit JMK-2 and response to OTS-RE-3D.

(2) Per Schedule D-6 of Exhibit Future 1-Revised.

Docket No. R-00943271
Schedule TSC-12

PENNSYLVANIA POWER & LIGHT COMPANY

Adjustment to Disallow SFAS No. 112 Accrual
Test Year Ending September 30, 1995
($000)

	Total Company	Pennsylvania Jurisdictional (1)
SFAS No. 112 Accrual (2)	$ 996	$ 862
Percent to O&M (3)	68.70%	68.70%
Adjustment to O&M	$ (684)	$ (592)
State Income Tax (4)	0	0
Federal Income Tax (4)	0	0
Adjustment to Net Income	$ 684	$ 592

Notes:

(1) Reflects ratio of 86.5518% per Exhibit JMK-2 and response to OTS-RE-3D.

(2) Per response to OCA IV-106 and OTS-RE-105D.

(3) Percent applicable to benefits per Exhibit Future 1, Schedules D-6 and D-10.

(4) Adjustment has no income tax effects since expense was not recognized as tax deductible in the Company's filing.

PENNSYLVANIA POWER & LIGHT COMPANY

Adjustment to Nuclear Decommissioning Contributions
to Reflect Revised Funding Assumptions
Test Year Ending September 30, 1995
($000)

	Total Company	Pennsylvania Jurisdictional (1)
Recommended Funding Contribution Susquehanna Unit 1 (2)	$ 6,238	$ 4,894
Susquehanna Unit 2 (3)	9,028	7,083
Total	$ 15,266	$ 11,977
Amount per Company	30,042	23,570
Adjustment to Expense	$(14,776)	$(11,593)
Tax deductible cost per OCA (4)	$ 15,110	$ 11,855
Tax deductible cost per Company	28,720	22,533
Adjustment to taxable income	$ 13,610	$ 10,678
State Income Tax at 10.99%	1,496	1,174
Federal Income Tax at 35%	4,240	3,326
Adjustment to Net Income	$ 9,040	$ 7,093

Notes:

(1) Reflects ratio of 78.456% per Exhibit JMK-2.

(2) Refer to page 2 of this schedule.

(3) Refer to page 3 of this schedule.

(4) Recognizes that only 97.5 percent of Unit 1 decommissioning contributions are tax deductible.

PENNSYLVANIA POWER & LIGHT COMPANY

Susquehanna 1 Decommissioning Model
Trust Fund Summary
($000)

Line No	Year	Revenue Rqmt. [1]	Tax Qualified Trust Earning Rate [2]	Transfer To Trust [3]	Earnings [4]	Management Fee [5]	Net Additions	Decomm. Expend [6]	Balance
1	Beginning Balance								$56,548
2	1995	$6,238	0.0720	$1,560	$1,032	$0	$2,591	$0	59,139
3	1996	6,238	0.0720	6,238	4,559	0	10,797	0	69,937
4	1997	6,238	0.0720	6,238	5,351	0	11,589	0	81,525
5	1998	6,238	0.0720	6,238	6,200	0	12,438	0	93,963
6	1999	6,238	0.0720	6,238	7,112	0	13,350	0	107,313
7	2000	6,238	0.0720	6,238	8,090	0	14,328	0	121,641
8	2001	6,238	0.0720	6,238	9,140	0	15,378	0	137,020
9	2002	6,238	0.0720	6,238	10,268	0	16,506	0	153,525
10	2003	6,238	0.0720	6,238	11,477	0	17,715	0	171,241
11	2004	6,238	0.0720	6,238	12,776	0	19,014	0	190,254
12	2005	6,238	0.0720	6,238	14,169	0	20,407	0	210,662
13	2006	6,238	0.0720	6,238	15,665	0	21,903	0	232,565
14	2007	6,238	0.0720	6,238	17,271	0	23,509	0	256,074
15	2008	6,238	0.0720	6,238	18,994	0	25,232	0	281,305
16	2009	6,238	0.0720	6,238	20,843	0	27,081	0	308,387
17	2010	6,238	0.0720	6,238	22,828	0	29,066	0	337,453
18	2011	6,238	0.0720	6,238	24,958	0	31,196	0	368,649
19	2012	6,238	0.0720	6,238	27,245	0	33,483	0	402,132
20	2013	6,238	0.0720	6,238	29,699	0	35,937	0	438,069
21	2014	6,238	0.0720	6,238	32,333	0	38,571	0	476,641
22	2015	6,238	0.0720	6,238	35,160	0	41,398	0	518,039
23	2016	6,238	0.0720	6,238	38,195	0	44,433	0	562,472
24	2017	6,238	0.0720	6,238	41,452	0	47,690	0	610,161
25	2018	6,238	0.0720	6,238	44,947	0	51,185	0	661,346
26	2019	6,238	0.0720	6,238	48,699	0	54,937	0	716,283
27	2020	6,238	0.0720	6,238	52,725	0	58,963	0	775,246
28	2021	6,238	0.0720	6,238	57,047	0	63,285	0	838,531
29	2022	6,238	0.0720	3,119	61,209	0	64,328	(10,123)	892,736
30	2023	0	0.0720	0	63,335	0	63,335	(58,297)	897,775
31	2024	0	0.0720	0	57,014	0	57,014	(244,153)	710,636
32	2025	0	0.0720	0	42,640	0	42,640	(262,397)	490,879
33	2026	0	0.0720	0	27,179	0	27,179	(244,463)	273,595
34	2027	0	0.0720	0	14,549	0	14,549	(152,903)	135,241
35	2028	0	0.0720	0	9,836	0	9,836	(2,127)	142,950
36	2029	0	0.0720	0	10,398	0	10,398	(2,206)	151,142
37	2030	0	0.0720	0	10,996	0	10,996	(2,294)	159,844
38	2031	0	0.0720	0	9,613	0	9,613	(58,412)	111,045
39	2032	0	0.0720	0	4,376	0	4,376	(104,525)	10,896
40	2033	0	0.0720	0	392	0	392	(11,287)	$2
		$174,664		$166,867	$929,773	$0	$1,096,640	($1,153,186)	

Notes:

1) The 1995 Revenue Requirement was chosen so that the Decommissioning Fund Balance is zero in the last year of decommissioning.
2) Projected after-tax earning rate.
3) Same as revenue requirement except for first and last year where partial year amounts are recognized.
4) Prior Year Balance compounded semiannually at Current Year Earning Rate + ½ Current Year Transfer x Current Year Earnings Rate - 1/2 Decommissioning Expenditure x Current Year Earnings Rate.
5) Reflected as a .3% reduction in earnings rate.
6) PP&L 90% share of costs inflated to future price levels.

PENNSYLVANIA POWER & LIGHT COMPANY

Susquehanna 2 Decommissioning Model
Trust Fund Summary
($000)

Line No	Year	Revenue Rqmt. [1]	Tax Qualified Trust Earning Rate [2]	Transfer To Trust [3]	Earnings [4]	Management Fee [5]	Net Additions	Decomm. Expend [6]	Balance
1	Beginning Balance								$41,717
2	1995	$9,028	0.0720	$2,257	$771	$0	$3,028	$0	44,745
3	1996	9,028	0.0720	9,028	3,605	0	12,633	0	57,378
4	1997	9,028	0.0720	9,028	4,531	0	13,559	0	70,937
5	1998	9,028	0.0720	9,028	5,524	0	14,553	0	85,490
6	1999	9,028	0.0720	9,028	6,591	0	15,619	0	101,109
7	2000	9,028	0.0720	9,028	7,736	0	16,764	0	117,874
8	2001	9,028	0.0720	9,028	8,965	0	17,993	0	135,867
9	2002	9,028	0.0720	9,028	10,283	0	19,312	0	155,178
10	2003	9,028	0.0720	9,028	11,699	0	20,727	0	175,906
11	2004	9,028	0.0720	9,028	13,218	0	22,246	0	198,152
12	2005	9,028	0.0720	9,028	14,849	0	23,877	0	222,029
13	2006	9,028	0.0720	9,028	16,599	0	25,627	0	247,656
14	2007	9,028	0.0720	9,028	18,477	0	27,506	0	275,162
15	2008	9,028	0.0720	9,028	20,493	0	29,522	0	304,683
16	2009	9,028	0.0720	9,028	22,657	0	31,685	0	336,369
17	2010	9,028	0.0720	9,028	24,980	0	34,008	0	370,377
18	2011	9,028	0.0720	9,028	27,472	0	36,500	0	406,877
19	2012	9,028	0.0720	9,028	30,147	0	39,176	0	446,053
20	2013	9,028	0.0720	9,028	33,019	0	42,047	0	488,100
21	2014	9,028	0.0720	9,028	36,101	0	45,129	0	533,229
22	2015	9,028	0.0720	9,028	39,409	0	48,437	0	581,666
23	2016	9,028	0.0720	9,028	42,959	0	51,987	0	633,653
24	2017	9,028	0.0720	9,028	46,769	0	55,798	0	689,451
25	2018	9,028	0.0720	9,028	50,859	0	59,887	0	749,338
26	2019	9,028	0.0720	9,028	55,249	0	64,277	0	813,615
27	2020	9,028	0.0720	9,028	59,960	0	68,988	0	882,603
28	2021	9,028	0.0720	9,028	65,016	0	74,045	0	956,647
29	2022	9,028	0.0720	9,028	70,443	0	79,472	0	1,036,119
30	2023	9,028	0.0720	9,028	76,268	0	85,297	0	1,121,416
31	2024	9,028	0.0720	2,257	81,727	0	83,984	(15,260)	1,190,140
32	2025	0	0.0720	0	86,501	0	86,501	(20,325)	1,256,316
33	2026	0	0.0720	0	91,257	0	91,257	(22,938)	1,324,636
34	2027	0	0.0720	0	93,609	0	93,609	(96,697)	1,321,548
35	2028	0	0.0720	0	84,706	0	84,706	(337,739)	1,068,514
36	2029	0	0.0720	0	65,684	0	65,684	(350,932)	783,267
37	2030	0	0.0720	0	44,177	0	44,177	(367,601)	459,843
38	2031	0	0.0720	0	24,035	0	24,035	(268,592)	215,286
39	2032	0	0.0720	0	8,883	0	8,883	(191,587)	32,582
40	2033	0	0.0720	0	1,173	0	1,173	(33,753)	$2
		$270,849		$257,307	$1,406,401	$0	$1,663,708	($1,705,423)	

Notes:

1) The 1995 Revenue Requirement was chosen so that the Decommissioning Fund Balance is zero in the last year of decommissioning.
2) Projected after-tax earning rate.
3) Same as revenue requirement except for first and last year where partial year amounts are recognized.
4) Prior Year Balance compounded semiannually at Current Year Earning Rate + ½ Current Year Transfer x Current Year Earnings Rate - 1/2 Decommissioning Expenditure x Current Year Earnings Rate.
5) Reflected as a .3% reduction in earnings rate.
6) PP&L 90% share of costs inflated to future price levels.

PENNSYLVANIA POWER & LIGHT COMPANY

Adjustment to Decommissioning Contributions
to Reflect Adjustments to Decommissioning Costs
Test Year Ending September 30, 1995
($000)

	Total Company	Pennsylvania Jurisdictional (1)
Funding Contributions Based on OCA Cost		
Susquehanna Unit 1 (2)	$ 3,482	$ 2,732
Susquehanna Unit 2 (3)	5,382	4,223
Total	$ 8,864	$ 6,955
Funding Contributions Based on Company Cost and OCA Funding Assumptions (4)	15,266	11,977
Adjustment to Expense	$(6,402)	$(5,022)
Tax Deduction Based on OCA Cost (5)	8,777	6,887
Tax Deduction Based on Company Cost (4)	15,110	11,855
Adjustment to Taxable Income	$(6,333)	$(4,968)
State Income Tax at 10.99%	696	546
Federal Income Tax at 34%	1,973	1,548
Adjustment to Net Income	$ 3,733	$ 2,928

Notes:

(1) Reflects ratio of 78.456 percent per Exhibit JMK-2.
(2) Refer to page 2 of this schedule.
(3) Refer to page 3 of this schedule.
(4) Refer to Schedule TSC-14.
(5) Recognizes that only 97.5 percent of Unit 1 decommissioning contributions are tax deductible.

PENNSYLVANIA POWER & LIGHT COMPANY

Susquehanna 1 Decommissioning Model
Trust Fund Summary
($000)

Line No	Year	Revenue Rqmt. [1]	Tax Qualified Trust: Earning Rate [2]	Transfer To Trust [3]	Earnings [4]	Management Fee [5]	Net Additions	Decomm. Expend [6]	Balance
1	Beginning Balance								$56,548
2	1995	$3,482	0.0720	$871	$1,026	$0	$1,896	$0	58,444
3	1996	3,482	0.0720	3,482	4,409	0	7,891	0	66,335
4	1997	3,482	0.0720	3,482	4,987	0	8,469	0	74,805
5	1998	3,482	0.0720	3,482	5,608	0	9,090	0	83,895
6	1999	3,482	0.0720	3,482	6,275	0	9,757	0	93,652
7	2000	3,482	0.0720	3,482	6,990	0	10,472	0	104,123
8	2001	3,482	0.0720	3,482	7,757	0	11,239	0	115,362
9	2002	3,482	0.0720	3,482	8,581	0	12,063	0	127,425
10	2003	3,482	0.0720	3,482	9,465	0	12,947	0	140,372
11	2004	3,482	0.0720	3,482	10,414	0	13,896	0	154,268
12	2005	3,482	0.0720	3,482	11,433	0	14,915	0	169,183
13	2006	3,482	0.0720	3,482	12,526	0	16,008	0	185,191
14	2007	3,482	0.0720	3,482	13,699	0	17,181	0	202,372
15	2008	3,482	0.0720	3,482	14,958	0	18,440	0	220,812
16	2009	3,482	0.0720	3,482	16,310	0	19,792	0	240,604
17	2010	3,482	0.0720	3,482	17,761	0	21,243	0	261,847
18	2011	3,482	0.0720	3,482	19,318	0	22,800	0	284,647
19	2012	3,482	0.0720	3,482	20,989	0	24,471	0	309,118
20	2013	3,482	0.0720	3,482	22,782	0	26,264	0	335,382
21	2014	3,482	0.0720	3,482	24,708	0	28,190	0	363,571
22	2015	3,482	0.0720	3,482	26,774	0	30,256	0	393,827
23	2016	3,482	0.0720	3,482	28,991	0	32,473	0	426,300
24	2017	3,482	0.0720	3,482	31,371	0	34,853	0	461,154
25	2018	3,482	0.0720	3,482	33,926	0	37,408	0	498,562
26	2019	3,482	0.0720	3,482	36,668	0	40,150	0	538,712
27	2020	3,482	0.0720	3,482	39,611	0	43,093	0	581,805
28	2021	3,482	0.0720	3,482	42,769	0	46,251	0	628,056
29	2022	3,482	0.0720	1,741	45,781	0	47,522	(8,771)	666,807
30	2023	0	0.0720	0	47,056	0	47,056	(50,517)	663,346
31	2024	0	0.0720	0	41,287	0	41,287	(203,724)	500,908
32	2025	0	0.0720	0	28,836	0	28,836	(218,847)	310,897
33	2026	0	0.0720	0	15,447	0	15,447	(203,890)	122,454
34	2027	0	0.0720	0	4,409	0	4,409	(126,855)	$8
		$97,496		$93,144	$662,925	$0	$756,068	($812,605)	

Notes:

1) The 1995 Revenue Requirement was chosen so that the Decommissioning Fund Balance is zero in the last year of decommissioning.
2) Projected after-tax earning rate.
3) Same as revenue requirement except for first and last year where partial year amounts are recognized.
4) Prior Year Balance compounded semiannually at Current Year Earning Rate + ½ Current Year Transfer x Current Year Earnings Rate - 1/2 Decommissioning Expenditure x Current Year Earnings Rate.
5) Reflected as a .3% reduction in earnings rate.
6) PP&L 90% share of costs inflated to future price levels.

PENNSYLVANIA POWER & LIGHT COMPANY

Susquehanna 2 Decommissioning Model
Trust Fund Summary
($000)

Line No	Year	Revenue Rqmt. [1]	Tax Qualified Trust: Earning Rate [2]	Transfer To Trust [3]	Earnings [4]	Management Fee [5]	Net Additions	Decomm. Expend [6]	Balance
1	Beginning Balance								$41,717
2	1995	$5,382	0.0720	$1,345	$763	$0	$2,108	$0	43,825
3	1996	5,382	0.0720	5,382	3,406	0	8,787	0	52,613
4	1997	5,382	0.0720	5,382	4,050	0	9,432	0	62,044
5	1998	5,382	0.0720	5,382	4,741	0	10,123	0	72,167
6	1999	5,382	0.0720	5,382	5,483	0	10,865	0	83,032
7	2000	5,382	0.0720	5,382	6,280	0	11,661	0	94,693
8	2001	5,382	0.0720	5,382	7,134	0	12,516	0	107,209
9	2002	5,382	0.0720	5,382	8,052	0	13,433	0	120,642
10	2003	5,382	0.0720	5,382	9,036	0	14,418	0	135,060
11	2004	5,382	0.0720	5,382	10,093	0	15,475	0	150,535
12	2005	5,382	0.0720	5,382	11,227	0	16,609	0	167,144
13	2006	5,382	0.0720	5,382	12,445	0	17,826	0	184,970
14	2007	5,382	0.0720	5,382	13,751	0	19,133	0	204,103
15	2008	5,382	0.0720	5,382	15,154	0	20,535	0	224,638
16	2009	5,382	0.0720	5,382	16,659	0	22,040	0	246,678
17	2010	5,382	0.0720	5,382	18,274	0	23,656	0	270,334
18	2011	5,382	0.0720	5,382	20,008	0	25,390	0	295,723
19	2012	5,382	0.0720	5,382	21,869	0	27,251	0	322,974
20	2013	5,382	0.0720	5,382	23,866	0	29,248	0	352,222
21	2014	5,382	0.0720	5,382	26,010	0	31,392	0	383,613
22	2015	5,382	0.0720	5,382	28,311	0	33,693	0	417,306
23	2016	5,382	0.0720	5,382	30,781	0	36,162	0	453,468
24	2017	5,382	0.0720	5,382	33,431	0	38,813	0	492,281
25	2018	5,382	0.0720	5,382	36,276	0	41,657	0	533,938
26	2019	5,382	0.0720	5,382	39,329	0	44,711	0	578,649
27	2020	5,382	0.0720	5,382	42,606	0	47,988	0	626,637
28	2021	5,382	0.0720	5,382	46,124	0	51,505	0	678,142
29	2022	5,382	0.0720	5,382	49,899	0	55,280	0	733,422
30	2023	5,382	0.0720	5,382	53,951	0	59,332	0	792,755
31	2024	5,382	0.0720	1,345	57,677	0	59,022	(13,257)	838,519
32	2025	0	0.0720	0	60,824	0	60,824	(17,658)	881,685
33	2026	0	0.0720	0	63,907	0	63,907	(19,928)	925,664
34	2027	0	0.0720	0	64,832	0	64,832	(83,770)	906,726
35	2028	0	0.0720	0	56,225	0	56,225	(284,290)	678,661
36	2029	0	0.0720	0	39,109	0	39,109	(295,396)	422,374
37	2030	0	0.0720	0	19,819	0	19,819	(309,428)	132,764
38	2031	0	0.0720	0	4,780	0	4,780	(137,540)	$3
		$161,445		$153,373	$966,183	$0	$1,119,555	($1,161,269)	

Notes:

1) The 1995 Revenue Requirement was chosen so that the Decommissioning Fund Balance is zero in the last year of decommissioning.
2) Projected after-tax earning rate.
3) Same as revenue requirement except for first and last year where partial year amounts are recognized.
4) Prior Year Balance compounded semiannually at Current Year Earning Rate + ½ Current Year Transfer x Current Year Earnings Rate - 1/2 Decommissioning Expenditure x Current Year Earnings Rate.
5) Reflected as a .3% reduction in earnings rate.
6) PP&L 90% share of costs inflated to future price levels.

Docket No. R-00943271
Schedule TSC-16
Updated 5/19/95

PENNSYLVANIA POWER & LIGHT COMPANY

Adjustment to Eliminate
Accrual for Decommissioning Fossil Units
Test Year Ending September 30, 1995
($000)

	Total Company	Pennsylvania Jurisdictional
Adjustment to Eliminate Expense (1)	$(55,570)	$(45,284)
State Income Tax at 10.99%	6,107	4,977
Federal Income Tax at 35%	17,312	14,107
Adjustment to Net Income	$32,151	$26,200

Notes:

(1) Amount per Schedule D-12 of Exhibit Future 1-Revised. Jurisdictional amount based on factor of .81489 per Exhibit JMK-2.

Docket No. R-00943271
Schedule TSC-17
Updated 5/19/95

PENNSYLVANIA POWER & LIGHT COMPANY

Adjustment to
of Susquehanna Early Window Deferrals
Test Year Ending September 30, 1995
($000)

	Amount (1)
Adjustment to Eliminate Annual Amortization of Deferral (2)	$(3,922)
State Income Tax (3)	0
Federal Income Tax (3)	0
Adjustment to Net Income	$ 3,922

Notes:

(1) Full amount of amortization is allocable to the Pennsylvania jurisdiction.

(2) Per Schedule D-14 of Exhibit Future 1-Revised.

(3) Adjustment has no tax effects since expense was not recognized as tax deductible in the Company's filing.

PENNSYLVANIA POWER & LIGHT COMPANY

Adjustment to the Amortization of
Susquehanna Refueling Outage Costs
Test Year Ending September 30, 1995
($000)

	Total Company	Pennsylvania Jurisdictional (1)
Susquehanna Unit 1 Reload 8 Costs Subject to Amortization (1)	$ 16,502	
Amortization Period (5/22/95 - 11/4/96) (1)	532 days	
Annual Amortization	$ 1,322	$8,885
Susquehanna Unit 2 Reload 7 Costs Subject to Amortization (1)	14,642	
Amortization Period (11/13/95 - 5/19/97) (2)	553 days	
Annual Amortization	$ 9,664	$7,585
Total Annual Refueling Outage Costs	$ 20,986	$16,470
Amount Per Company (1)	22,402	17,581
Adjustment to Expense	$ (1,416)	$(1,111)
State Income Tax at 10.99%	156	122
Federal Income Tax at 35%	441	346
Adjustment to Net Income	$ 819	$ 643

Notes:

(1) Per response to OCA IX-14

(2) Per response to DR-OCA-3.

Docket No. R-00943271
Schedule TSC-20
Updated 5/19/95

PENNSYLVANIA POWER & LIGHT COMPANY

Adjustment to Depreciation Expense
Test Year Ending September 30, 1995
($000)

	Total Company	Pennsylvania Jurisdictional (1)
Adjustment to Depreciation Expense (1)	$(50,915)	$(40,757)
Deferred Federal Income Tax Effect	17,820	14,265
Adjustment to Net Income	$33,095	$26,492

Note:

(1) Per surrebuttal testimony of Dr. Charles E. Johnson.

PENNSYLVANIA POWER & LIGHT COMPANY

Adjustment to EDI/IDI Credits
Test Year Ending September 30, 1995
($000)

	Amount (1)
EDI/IDI Credits to be Absorbed by Company (2)	$12,666
Gross Receipts Tax at 4.4%	557
Adjustment to Taxable Income	$12,109
State Income Tax at 10.99%	1,331
Federal Income Tax at 35%	3,772
Adjustment to Net Income	$7,006

Note:

(1) The full amount of the credits are allocable to Pennsylvania jurisdictional operations.

(2) Per testimony of Dr. Charles E. Johnson.

PENNSYLVANIA POWER & LIGHT COMPANY

Adjustment to Gross Receipts Tax
to Exclude Uncollectibles
Test Year Ending September 30, 1995
($000)

	Amount (1)
Uncollectibles Expense per Company (2)	$16,932
Gross Receipts Tax Rate	.044
Adjustment to Gross Receipts Tax	$ 745
State Income Tax at 10.99%	82
Federal Income Tax at 35%	232
Adjustment to Net Income	$ 431

Notes:

(1) Full amount of uncollectibles expense and, therefore, total adjustment is allocable to Pennsylvania jurisdictional operations.

(2) Per response to OCA IV-56.

Docket No. R-00943271
Schedule TSC-23
5/19/95

PENNSYLVANIA POWER & LIGHT COMPANY

Adjustment to Eliminate Certain
Additions and Deductions to Taxable Income
Test Year Ending September 30, 1995
($000)

	Total Company	Pennsylvania Jurisdictional (1)
Adjustment to Taxable Income to Eliminate Additions for:		
ECR/FAC Overrecovery (2)	$(9,690)	$(9,690)
Refueling Outage Costs (2)	(2,724)	(2,138)
Bad Debt Accrual (2)	(1,959)	(1,959)
Power Plant Inventory - Tax Accounting Change (2)	5,012	4,083
Adjustment to Taxable Income	(9,361)	(9,704)
State Income Tax at 10.99%	(1,029)	(1,066)
Federal Income Tax at 35%	(2,916)	(3,023)
Adjustment to Net Income	$ 3,945	$ 4,089

Notes:

(1) Per Exhibit JMK-2.

(2) Per Schedule D-19 of Exhibit Future 1-Revised.

PENNSYLVANIA POWER & LIGHT COMPANY

Adjustment to Eliminate
Accruals for Potential Tax Deficiencies
Test Year Ending September 30, 1995
($000)

	Total Company	Pennsylvania Jurisdictional (1)
Reverse State Tax Accrual (2)	$ (252)	$ (213)
Reverse Federal Tax Accrual (2)	(948)	(804)
Total Adjustment to Net Income	$1,200	$1,017

Notes:

(1) Per Exhibit JMK-2

(2) Per Schedule D-19 of Exhibit Future 1.

PENNSYLVANIA POWER & LIGHT COMPANY

Adjustment to Recognize
Consolidated Tax Savings
Test Year Ending September 30, 1995
($000)

	Taxable Income (1)		
	1993	1994	Test Year
Lady Jane	$ (395)	$ (686)	$ (590)
Realty Co. of Pennsylvania	(419)	(240)	(239)
Pennsylvania Mines Corp. (2)	(5,804)	(6,384)	(5,225)
Rushton Mining	(551)	(345)	(529)
Power Mktg. Development	N/A	(601)	N/A
Total Loss Companies	$ (7,169)	$ (8,256)	$ (6,583)
CEP Group Inc.	1,100	0	1,300
Green Manor Coal Co.	2,984	3,100	3,265
Pennsylvania Power & Light	462,395	504,740	548,752
Total Gain Companies	$466,479	$507,840	$553,317
Percent of Gain from PP&L	99.125%	99.390%	99.175%
Total Loss	(7,169)	(8,256)	(6,583)
Loss Allocable to PP&L	$ (7,106)	$ (8,206)	$ (6,529)
Average Tax Loss Allocable to PP&L			$ 7,280
Federal Income Tax Rate			35%
Consolidated Tax Savings			$ 2,548
Jurisdictional Percentage (3)			84.81%
Jurisdictional Consolidated Tax Savings			$ 2,161

Notes:

(1) Amounts for 1993 and the 1995 test year per Attachment II-D-23b of PP&L Filing Requirements. Amount for 1994 response to OCA IV-121. Interstate Energy Corporation has been excluded since income fluctuates between gains and losses and normalized income is expected to be $0.

(2) Pennsylvania Mines Corporation had a tax loss of $21,616,200 on 1993. However, this loss reflected mine closing costs. Therefore, the average of 1994 and 1995 test year amounts were used for 1993.

(3) Reflects percentage applicable to adjustments to federal income taxes per Exhibit JMK-2.

Docket No. R-00943271
Schedule TSC-26
Updated 5/19/95

PENNSYLVANIA POWER & LIGHT COMPANY

Interest Synchronization Adjustment
Test Year Ending September 30, 1995
($000)

	Amount
OCA Recommended Rate Base	$4,937,249
Weighted Cost of Debt	3.73%
Synchronized Interest Expense	$184,159
Interest Expense per Company	$186,072
Change in Interest Expense	($1,913)
State Income Tax	$210
Federal Income Tax	$596

Docket No. R-00943271
Schedule TSC-27
Updated 5/19/95

PENNSYLVANIA POWER & LIGHT COMPANY

Reconciliation of State and Federal Income Taxes
Test Year Ending September 30, 1995
($000)

Description		Test Year Adjusted Per Company	OCA Adjustments	Test Year at Present Rates	OCA Proforma Increase	Test Year at Proposed Rates
CALCULATION OF STATE INCOME TAX						
Net Operating Income Before Income Taxes		$490,162	$135,352	$625,514	($63,075)	$562,439
Net Adjustments for State Taxable Income		83	(61,503)	(61,420)	0	(61,420)
State Taxable Income		$490,245	$73,849	$564,094	($63,075)	$501,019
State Income Tax at	10.99%	$53,878	$8,116	$61,994	($6,932)	$55,062
State Income Tax Adjustments		213	(213)	0	0	0
Total State Income Tax		$54,091	$7,903	$61,994	($6,932)	$55,062
CALCULATION OF FEDERAL INCOME TAX						
Net Operating Income Before Income Taxes		$490,162	$135,352	$625,514	($63,075)	$562,439
Net Adjustments for Federal Taxable Income		0	(67,677) 1/	(67,677)	0	(67,677)
State Income Tax		(53,878)	(8,116)	(61,994)	6,932	(55,062)
Federal Taxable Income		$436,284	$59,559	$495,843	($56,143)	$439,700
Federal Income Tax at	35.0%	$152,699	$20,845	$173,545	($19,650)	$153,895
Federal Tax Adjustment		804	(804)	0	0	0
Total Federal Income Tax		$153,503	$20,041	$173,545	($19,650)	$153,895
Total Calculated Current Taxes		$207,594	$27,944	$235,539	($26,582)	$208,957
Total Current Taxes (Schedule TSC-1, Page 1)		207,593	27,944	235,537	(26,582)	208,955
Difference /Rounding		$1	$0	$2	$0	$2

Notes:
1/ Includes the adjustment for consolidated tax savings.

Docket No. R-00943271
Schedule TSC-28

PENNSYLVANIA POWER & LIGHT COMPANY

Adjustment to VERP Amortization
Test Year Ending September 30, 1995
($000)

	Total Company	Pennsylvania Jurisdictional (1)
Estimated VERP Costs to be Deferred (2)	$75,859	$65,661
Less: Savings to be Deferred Prior to End of Test Year (3)	28,996	25,098
Net VERP Costs to be Amortized	$46,863	$40,563
Amortization Period	5 years	5 years
Annual Amortization Expense	$9,373	$8,113
Amortization per Company (2)	15,172	13,132
Adjustment to Expense	$(5,799)	(5,019)
State Income Tax at 10.99%	637	552
Federal Income Tax at 35%	1,807	1,563
Adjustment to Net Income	$3,355	$2,904

Notes:

(1) Reflects factor of 86.5560% per Exhibit JMK-2.

(2) Per Schedule D-10 (Revised 5/12/95) of Exhibit Future 1-Revised.

(3) Reflects nine months savings for January-September 1995, per source in Note (2).

APPENDIX B

APPENDIX B

DOCUMENTS ENTERED BY

THE OFFICE OF CONSUMER ADVOCATE

OCA CROSS-EXAMINATION EXHIBITS

Exhibit	Description	Date
1	OCA-V-20	3-21-95
2	OCA-IV-66 OCA-IV-67	3-21-95
3	OCA-IV-105	3-21-95
4	OCA-III-8	3-21-95
5	OCA-III-10	3-21-95
6	OCA-V-47	3-23-95
7*	Net Present Value Deficiency Amount	3-23-95
8	OCA-IV-84	3-27-95
9	OCA-IX-14	3-27-95
10	OCA-IV-99	3-27-95
11	OCA-I-17 OCA-I-18 OCA-I-39	3-27-95
12	OCA-IV-11	3-27-95
13	OCA-IV-118	3-27-95
14	CEPFOD-I-11	3-29-95
15	OCA-I-3 OCA-I-27 OCA-I-30 OCA-I-33 OCA-II-2 OCA-II-14 OCA-II-30 OCA-VIII-1 OCA-VIII-3 OTS-RB-37	3-30-95
16	AIF/NESP-036 Excerpt	3-30-95

***Exhibit Contains Proprietary Information**

OCA CROSS-EXAMINATION EXHIBITS

Exhibit	Description	Date
17	OCA-II-15 OCA-II-16	3-30-95
18	OCA-II-17 OCA-II-20	3-30-95
19	1995 ARPR Chart	5-26-95
20	OCA-IV-46	5-26-95
21*	Strategy 2000 Report	5-26-95
22	OCA-XVI-11 OCA-XVI-12 OCA-XVI-13 OCA-XVI-14 OCA-XVI-15 OCA-XVI-19	5-26-95
23	OCA-XVI-24	5-26-95

***Exhibit Contains Proprietary Information**

STATEMENTS ENTERED BY OCA

Number	Description	Date
St. 1	Direct Testimony of Matthew I. Kahal on Rate of Return and Nuclear Decommissioning Trust Fund Issues	4-28-95
St. 1A	Surrebuttal Testimony of Matthew I. Kahal on Rate of Return	5-23-95
St. 1A	Surrebuttal Testimony of Matthew I. Kahal on Nuclear Decommissioning Trust Fund and Other Financial Issues	5-23-95
St. 2*	Additional Direct Testimony of Matthew I. Kahal on Excess Capacity	4-28-95
St. 2A*	Surrebuttal Testimony of Matthew I. Kahal on Excess Capacity	5-26-95
St. 3	Direct Testimony of Dr. Charles Johnson on Cost of Service and Rate Design	4-26-95
St. 3A	Rebuttal Testimony of Dr. Charles Johnson on Cost of Service and Rate Design	5-25-95
St. 3B	Surrebuttal Testimony of Dr. Charles Johnson on Cost of Service and Rate Design	5-25-95
St. 4	Direct Testimony of Dale Bridenbaugh on Nuclear Issues	5-3-95
St. 4A	Surrebuttal Testimony of Dale Bridenbaugh on Nuclear Issues	5-26-95

***Testimony Contains Proprietary Information**

STATEMENTS ENTERED BY OCA

Number	Description	Date
St. 5	Direct Testimony of Dr. Charles Johnson on Depreciation and Revenue Issues	5-3-95
St. 5A	Surrebuttal Testimony of Dr. Charles Johnson on Depreciation and Revenue Issues	5-25-95
St. 6	Direct Testimony of Thomas S. Catlin on Accounting	5-3-95
St. 6A	Surrebuttal Testimony of Thomas S. Catlin on Accounting	5-24-95

EXHIBITS ENTERED BY OCA

OCA EXHIBIT	CONTENTS	DATE
OCA St. 1 Sch. MIK-1-10	Schedules to accompany Direct Testimony of Matthew I. Kahal	4-28-95
OCA St. 1A Sch. MIK-1 to 7 May 1995 Update	Schedules to accompany Surrebuttal Testimony of Matthew I. Kahal	5-23-95
OCA St. 2 Sch. MIK-11 to 15*	Schedules to accompany Additional Direct Testimony of Matthew I. Kahal	4-28-95
OCA St. 1A Sch. MIK-1 to 7 May 1995 Update	Schedules to accompany Surrebuttal Testimony of Matthew I. Kahal	5-23-95
OCA St. 3 Exh. CEJ-1 Sch. 1 to 5	Schedules to accompany Direct Testimony of Dr. Charles Johnson	4-26-95
OCA St. 3A Exh. CEJ-3 Sch. 1 & 2	Schedules to accompany Rebuttal Testimony of Dr. Charles Johnson	5-25-95
OCA St. 3B Exh. CEJ-4 Sch. 1 to 3	Schedules to accompany Surrebuttal Testimony of Dr. Charles Johnson	5-25-95
OCA St. 4 Exh. DGB-1 to 12	Schedules to accompany Direct Testimony of Dale G. Bridenbaugh	5-3-95
OCA St. 4A Exh. DGB-12 to 16 Exh. DGB-13a Exh. DGB-13b	Schedules to accompany Surrebuttal Testimony of Dale G. Bridenbaugh	5-26-95
OCA St. 5 Exh. CEJ-2 Sch. 1 to 3	Schedules to accompany Further Direct Testimony of Dr. Charles Johnson	5-3-95
OCA St. 5A Exh. CEJ-5 Sch. 1 & 2	Schedules to accompany Surrebuttal Testimony of Dr. Charles Johnson	5-25-95

***Schedules Contains Proprietary Information**

EXHIBITS ENTERED BY OCA

OCA EXHIBIT	CONTENTS	DATE
OCA St. 6 Sch. TSC-1 to 27	Schedules to accompany Direct Testimony of Thomas S. Catlin	5-3-95
OCA St. 2A Sch. TSC-1 to 27 May 1995 Updates Sch. TSC-28 Catlin Exhibit 1	Schedules to accompany Surrebuttal Testimony of Thomas S. Catlin	5-24-95